San Juan Water District

SAN JUAN WATER DISTRICT

United States Bureau of Reclamation

Five-Year Water Management Plan Update

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Five-Year Water Management Plan Update

Final
December 2009

RESOLUTION NO. 12-18
San Juan Water District

Resolution Approving United States Bureau of Reclamation (USBR) Five-Year Water Management Plan Updates for San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, and Orange Vale Water Company

WHEREAS, San Juan Water District is committed to promoting water management, water efficiency, and water conservation; and

WHEREAS, San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, and Orange Vale Water Company have prepared Five-Year Water Management Plan Updates in accordance with the water supply contract with San Juan Water District and the Central Valley Project Improvement Act of 1992;

THEREFORE, BE IT RESOLVED, that the Board of Directors approves and adopts the United States Bureau of Reclamation Five-Year Water Management Plan Updates for San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, and Orange Vale Water Company; and

BE IT FURTHER RESOLVED, that the General Manager of the San Juan Water District is hereby directed to ensure that electronic copies of the Five-Year Water Management Plan Updates for San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, and Orange Vale Water Company and each agencies' Board of Directors' approval of the Plan to the United States Bureau of Reclamation; and

PASSED AND ADOPTED by the Board of Directors of the San Juan Water District on the 12th day of September 2012, by the following vote:

AYES:	DIRECTORS	Costa, Miller, Peterson, Tobin, Walters
NOES:	DIRECTORS	
ABSENT:	DIRECTORS	

PAMELA TOBIN
President, Board of Directors

ATTEST

TERI HART
Secretary, Board of Directors

Water Management Plan
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Section 1: Description of the District

District Name: San Juan Water District

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The San Juan Water District (District) includes both retail and wholesale service areas located in northeastern Sacramento County and southern Placer County. The District retail service area occupies portions of both Placer County and Sacramento County. The wholesale service area lies entirely in Sacramento County, and is comprised of Fair Oaks Water District (FOWD), Citrus Heights Water District (CHWD), Orange Vale Water Company (OVWC), and a portion of City of Folsom (Folsom). Collectively, the District's retail and wholesale service areas are referred to as the San Juan Family.

A. History

Water was supplied to a large part of the San Juan area through the North Fork Ditch Company, a Public Utilities Company organized in 1854 to supply water for mining. The North Fork Ditch Company had the oldest adjudicated water rights on the American River: 33,000-acre feet of water per year, dating back to 1854 for appropriation and 1890 for adjudication.

The North Fork Ditch Company acted primarily as a wholesaler selling to Orange Vale Mutual Water Company, formed in 1917, and Citrus Heights Irrigation District, formed in 1921.

The growth of the Sacramento area following World War II included rapid residential growth north and east of the City of Sacramento. As the San Juan area grew, the need for improved water supply became evident.

In the mid-1940s, construction of the Folsom Dam on the American River was authorized as a federal project, which meant that additional water supplies might be available for the San Juan area. In 1947, Directors of the three wholesale water agencies organized an informal committee to study the water problems, issues, and future needs of the area. Acquisition of the North Fork Ditch Company was considered as the first step toward solving the area's water problem. However, the committee was disbanded in 1949 without any positive action being taken. The San Juan area continued to grow, and the need for an improved water supply became even more apparent. As the Folsom Dam construction progressed, benefits, which could accrue to the North Fork Ditch Company in the form of additional water supplies, were evident. Under the leadership of Orange Vale Mutual Water Company, a committee composed of members of the three water purveyors was organized to study the feasibility of developing a new publicly owned water supply system, which would continue providing wholesale water to the existing service area. Late in 1953, the committee concluded that the acquisition of the North Fork Ditch Company was the proper step to take in order to obtain an adequate water supply.

Having determined that the acquisition of the North Fork Ditch Company, including properties and water rights, by a public district was the first essential step toward solving local water problems, issues, and future needs, the committee initiated the formation of a public district.

The committee believed the District should be formed to include the three existing water districts of Citrus Heights, Fair Oaks, Orange Vale, and lands continuous to or between these districts. They then sponsored a petition to the Sacramento County Board of Supervisors to create a new district, comprising such lands in Sacramento County. While petitions were being circulated to the retail customers of the North Fork Ditch Company, people in Placer County asked to be included. The boundaries of the proposed district were enlarged and Placer County representatives were added to the sponsoring committee.

San Juan Water District was formed as a result of an election held on February 10, 1954. At this election, voters approved the formation of the District by nearly a two-thirds majority and elected five Directors.

Immediately following the formation, the District negotiated a new sales price with the owners of the North Fork Ditch Company. At the time, the company served approximately 367 retail customers through its Cardwell, Fair Oaks, Rose Springs, and Ashland systems that became the San Juan Retail Service Area (RSA).

1. Provide date district formed: February 10, 1954
Date of first Reclamation contract: June 19, 1962
Original size (acres): 29,530
Current date (date of data entered): *Data entered in 2008*. *Data is for* 2008

2. Provide size, population, and irrigated acres

Retail Service Area:

	Year 2008
Retail Size (square miles)	17
Retail Population served	30,569
Irrigated acres	0

Wholesale and Retail Service Area Combined:

	Year 2008
Wholesale Size (square miles)	45
Wholesale Population served	156,681
Wholesale Irrigated acres	0

Wholesale population based on 2.9 people per single-family connection, 1.9 people per multi-family unit, and 4 units per multi-family connection. Wholesale information does not include Sacramento Suburban Water District water treated by San Juan Water District.

3. Provide water supplies received.

Water Source	Year 2008 AF
Federal urban water [a]	7,733
Federal agricultural water	--
State water	--
Local/other [b]	33,000
Local surface water [c]	13,183
Upslope drain water	--
District groundwater	--
Transferred water (into District)	--
Reclaimed water	--
Other (define)	--
Total	53,917[d]

[a] Includes Project and Temp/Sec 215 Sacramento PCWA water (District Retail USBR contract 6-07-20-W1373)

[b] Includes Water Right DA-04-167-E610.

[c] Includes District Retail PCWA and PCWA Raw contract water (December 7, 2000 supply contract) and Roseville.

[d] The calculations found in this table may not always result in a precise sum due to rounding.

4. Provide annual entitlement under each right and/or contract

	AF	Source	Contract #	Contract Restrictions
Urban AF/Year (AF/Y)	24,200	United States Bureau of Reclamation (USBR)	6-07-20-W1373	25% reduction during drought
Urban (AF/Y)	25,000	Placer County Water Agency (PCWA)	December 7, 2000 supply contract	Placer Co. portion of District wholesale service area only
Urban (AF/Y)	33,000	Water Right	DA-04-167-E610	75 cfs, 149 AF/day max

As part of the purchase of the North Fork Ditch Company, the District acquired 33,000 acre-feet of pre-1914 rights water. The District also negotiated with the United States Bureau of Reclamation (USBR) for an additional 40,000 acre-feet of contract water to provide for immediate and future needs.

In the late 1960's, the USBR worked out a mathematical formula for the District's future needs and reduced the contract amount from 40,000 acre-feet to 11,200 acre-feet per year. Immediately following the cutback, the District Board of Directors pursued the USBR to reinstate the original 40,000 acre-feet. To date, the District still has not had the original 40,000 acre-feet reinstated.

The District has contracted with Reclamation for 13,000 acre-feet of American River water for delivery from Folsom Lake as authorized by PL 101-514 (often referred to as "Fazio Water", named after congressman Vic Fazio), which can only be used in the Sacramento County portion of the wholesale service area.

In 2006, the 11,200 AF and 13,000 AF USBR contracts were combined, with restrictions including a 25% reduction during drought. The combined entitlement falls under contract number is 06-07-20-W1373. The previous 11,200 AF USBR contract 14-02-200-152I was dissolved.

In 1972, the District Board of Directors successfully negotiated a contract with Placer County Water Agency (PCWA) for additional water supply. This contract extends through 2021 and is renewable for 20-year periods. It provides for water to be supplied to the District in increasing amounts from 5,000 acre-feet beginning in 1977 to 25,000 acre-feet in the year 1992 and every year thereafter. The PCWA contract places a first priority on use in Placer County, but allows use of any water not needed in Placer County to be used in Sacramento County.

5. Describe anticipated land- use changes (i.e., agricultural to municipal, etc.).

Present land use is predominantly urban and suburban with a very small part remaining in irrigated agriculture and non-irrigated uses. Both irrigated and non-irrigated lands are rapidly being developed into residential, municipal, and small commercial uses. This trend is expected to continue until it is considered entirely an urban suburban area. There are a number of parcels two acres and larger that cannot be split at the present time due to zoning rules or to being land locked.

6. Cropping patterns.
There are no significant agricultural users in the District's service area.

7. List major irrigation methods (by acreage).

Irrigation Method	Acres
N/A	N/A

B. Location and Facilities

Appendix A shows the San Juan Water District Wholesale area and retail area boundaries. Measurement locations, conveyance system, and storage facilities are described in this section.

1. Incoming measurement methods and flow locations[a]

Location Name	Physical Location	Type of Measurement Device	Accuracy
Points of Delivery: Surface Water (Raw W): WTP Influent Meters (2)	WTP Site (Secure Location)	Venturi	± 0.75% of full scale
Turnouts: Raw Water: None Treated Water: Meter Sites #4 through #21, and Meter Sites #23 through 32	T-main System (Secure Locations)	Electromagnetic	± 0.2% of reading

Measurement Locations:			
Raw Water:			
USBR Meters	USBR Property (Secure Location)	Ultrasonic	± 0.5%-2.5% of rate
WTP Influent Meters	WTP Site (Secure Location)	(See "P.O.D." above)	(See "P.O.D." above)
Treated Water:			
Meter Site #1	T-main System	Electromagnetic	± 0.2% of reading
Meter Site #2	T-main System	Electromagnetic	± 0.2% of reading
Meter Site #3	T-main System	Electromagnetic	± 0.2% of reading
Meter Site #22	T-main System	Electromagnetic	± 0.2% of reading
Meter Site #33	T-main System (Secure Locations)	Electromagnetic	± 0.2% of reading
Conveyance System:			
Raw Water:			
SJWD-Whsl RW-T-Mains	± 1.1 mi of Pipelines (2) (Secure Locations)	(See "P.O.D." above)	(See "P.O.D." above)
Treated Water:			
SJWD-Retail Pipelines	± 205 mi of pipelines within service area (Secure Locations)	(See "Turnout Locations" above)	(See "Turnout Locations" above)
SJWD-Whsl. T-Mains	± 9.5 mi of pipelines within service area (Secure Locations)	(See "Measurement Locations" above)	(See "Measurement Locations" above)
Storage Facilities:			
Raw Water:			
None			
Envir. Mitigation Storage:			
Baldwin Reservoir	West of WTP (Secure Location)	None (No Meter)	N/A
Treated Water:			
Hinkle Reservoir	WTP Site (Secure Location)	None (No Meter)	N/A
Kokila Reservoir	North of WTP (Secure Location)	None (No Meter)	N/A
Los Lagos Tank	North of WTP (Secure Location)	None (No Meter)	N/A
Mooney Hydro-Tank	North of WTP (Secure Location)	None (No Meter)	N/A
Operational Loss Recov.			
Raw Water:			
Backwash Recovery	WTP Site	Electromagnetic	± 0.2% of reading
Thickener Recovery	WTP Site	Insertion (Single Pt)	± 18% of reading
Belt Press Recovery	WTP Site	Insertion (Single Pt)	± 18% of reading
Reclaim Recovery	WTP Site	Insertion (Multi-Pt)	± 18% of reading
Treated Water			
None	N/A	N/A	N/A
Water Quality Mon. Loc.:			
Raw Water			
WTP	WTP Site (Secure Location)	None (No Meter)	N/A
Treated Water			
Distribution System	____ Sites (Secure Locations)	None (No Meter)	N/A

[a] San Juan Water District retail has no groundwater wells; there are wells are located in retail service areas and discussed in individual retail plans.

Baldwin Reservoir is located west of Folsom Lake in the unincorporated community of Granite Bay in southwestern Placer County, located just west of Auburn Folsom Road near the Placer County line. Built in 1928 to provide additional water storage, Baldwin Reservoir was converted to a Wetlands Area in 1992. It became the Baldwin Reservoir Wetlands and Wildlife Preserve, a freshwater emergent wetlands including a riparian woodland with live oaks and a foothill pine woodland to the north and live oak – foothill pine woodland interspersed with residential to the east.

2. 2008 Agricultural Conveyance System

Miles Unlined - Canal	Miles Lined - Canal	Miles Piped	Miles - Other
N/A	N/A	N/A	N/A

3. 2008 Urban Distribution System – miles of pipe

Asbestos Cement	Concrete	Iron	Plastic	Steel	Other
109	3	13	59	15	15.5

Miles of pipe include both District retail and wholesale system pipes. Pipes greater than 30" in wholesale customer service areas are assumed to be District wholesale piping.

4. Storage facilities

Hinkle Reservoir serves as the primary storage reservoir for the Wholesale District. The Hinkle Reservoir is lined and covered and has a capacity of 62 million gallons (MG). The retail service area has two smaller storage facilities: Kokila Reservoir with a capacity of 4.5 MG and Los Lagos tank with a capacity of 1.6 MG.

Name	Type	Capacity (MG)	Distribution or Spill
Hinkle Reservoir	Above-ground	62	Distribution
Kokila Reservoir	Above-ground	4.5	Distribution
Los Lagos tank	Above-ground	1.6	Distribution

5. Outflow locations and measurement methods (Agricultural only)
There are no agricultural users or outflow locations in the District.

6. Description of agricultural spill recovery system.
There are no agricultural users or spill recovery systems in the District.

7. Agricultural delivery system operation
There are no agricultural users or delivery system operations in the District.

8. Restrictions on water source(s

Source	Restriction	Cause of Restriction	Effect on District Operations
USBR	25% reduction during	USBR	4% reduction of overall

	drought		supplies
PCWA	Water to be first used in Placer Co.	PCWA	Water cannot be used in Sacramento County unless surplus in Placer Co.
Water Rights	75 cfs, 149 AF/day max	USBR	

Note: The Sacramento Water Forum Agreement includes potential restrictions that would limit San Juan's supply to 54,200 AF.

9. Proposed changes or additions to facilities and operations for the next 5 years

Changes in wholesale operations will primarily be relative to implementation of the water forum agreement for conjunctive use for emergency and shortage conditions and will likely consist of additional wells within the wholesale service area to increase groundwater supplies.

Recommendations from the West Yost and Associates San Juan Water District 2005 Retail Water Master Plan Update are as follows:

Miscellaneous Improvements:

1. Construction of an emergency intertie from the PCWA water system into the Kokila Reservoir.
2. Construction of a new meter station on gravity line leaving Hinkle Reservoir.

Pipelines - For the existing water system, the recommended pipeline improvements are presented in the following table:

CIP ID[a]	Pressure Zone	Location	Length	Diameter, inches	
				Existing	Recommended
FF01	Upper Granite Bay	Along Skyway Lane from 8032 Skyway Lane to Mooney Ridge Tank Site	630	6	8
FF02	Crown Point	Along Lou Place between Crown Point Vista and Troy Way, and along Edward Court south of Lou Place	790	6	8
PH03	Bacon	Along Eureka Road, from Barton road to Auburn-Folsom Road[c]	5,275	16	18
EI02[b]	Bacon	From Sierra College Boulevard to Kokila Reservoir	1,500	NA	12
PH05[d]	Lower Granite Bay	Along Cavitt-Stallman Road between Oak Pine Lane and Sierra Ponds Lane	2,550	NA	12
PH06[d]	Lower	Along Twin Rocks Road	6,750	NA	16

	Granite Bay	between Vogel Valley Road and Sierra Ponds Lane (with one connection at Turner Drive)			

[a] The "FF" in the CIP ID stands for fire flow, "PH" stands for peak hour, and "EI" stands for Emergency Intertie. This means the CIP is fire flow or peak hour related.

[b] CIP is required for emergency intertie connection from PCWA to the District.

[c] CIP also includes replacement of the parallel 12-inch and 14-inch diameter pipelines along Eureka from Providence Lane to Auburn-Folsom Road.

[d] Then benefit and cost associated to these CIPs shall be proportionately shared by existing and future customers.

C. Topography and Soils

1. Topography of the district and its impact on water operations and management

The topography of the District ranges from nearly flat, gently rolling lands to fairly steep hillsides. Elevations range from 100 feet near the western boundary to 600 feet in the eastern portion of the area near Folsom Lake. Elevation differences require water to be pumped to the higher elevations.

2. District soil associations (Agric only)

Soil Association	Estimated Acres	Effect on Water Operations and Management
Angress coarse sandy loam	30%	Moderately deep, gentle rolling, well drained soil underlain by weathered bedrock. Moderate, rapid permeability.
Orangevale-Fiddyment	25%	Well drained soils that are very deep and well drained soils that are moderately deep over a cemented hardpan
Cometa-Fiddyment	15%	Undulating soils on low terraces with slow permeability
Redding-Corning-Red Bluff	10%	Moderately well drained soils that are moderately deep over a cemented hardpan and well drained and moderately well drained soils that are very deep
Auburn-Whiterock-Argonaut	10%	Somewhat excessively drained and well drained soils that are very shallow to moderately deep

The District does not provide agricultural water, therefore no soils map is provided.

3. Agricultural limitations resulting from soil problems (Agric only)

Most of the soil types are well drained and the District emphasizes irrigation education to its customers to encourage efficient water usage. However, there are no soils that present a significant impact to District operations or water management within the District's boundaries.

Soil Problem	Estimated Acres	Effect on Water Operations and Management
None	0	N/A

D. Climate

1. General climate of the district service area

The Southern Sacramento Valley, including the City of Sacramento, has a mild climate and an abundance of sunshine year-round. The summers are typically cloudless with warm, dry days and mild nights. The "rainy season" is from November through February providing over half the total annual precipitation. Mountains surround the Sacramento Valley to the west, north, and east. The Sierra Nevada snowfields are 70 miles east of Sacramento and usually provide a plentiful supply of water to the valley streams during the dry season. Because of the shielding influence of the high mountains, winter storms reach the valley in a modified form. However, torrential rain and heavy snow frequently fall on the Western Sierra Slopes, the Southern Cascades, and to a lesser extent, the Coastal Range. As a result, flood conditions occasionally occur along the Sacramento River and its tributaries. Excessive rainfall and damaging windstorms occur infrequently.

It is well known that relative humidity has a marked influence on the reaction of plants and animals to temperature. The extremely low relative humidity that accompanies high temperatures in the valley during the summer should be considered when comparing temperatures with cities in more humid regions of California.

Thunderstorms in Sacramento are few in number and usually occur in the late fall or in the spring. Snow is so rare and falls in such small amounts that its occurrence may be disregarded as a climatic feature. Dense fog occurs mostly in mid-winter, seldom in the spring or autumn, and never in the summer. Light and moderate fog is more frequent and may happen anytime during the wet, cold season. Fog is usually of the radiational cooling type and is confined to the early morning hours. Under stagnant atmospheric conditions, winter fog can become very persistent and may continue for several days.

The Western Region Climate Center's Folsom Dam, California Station No. 043113, reports precipitation and temperature for period of record 10/26/1955 to 4/30/1993 as summarized in the table below.

The California Irrigation Management Information System (CIMIS) weather station located closest to the District at an elevation of 265 feet is Fair Oaks station (#131). Active since April 1997, this station calculates the evapotranspiration (ET_o) rate for the grass reference surface every hour and publishes the daily ET_o average. The monthly average can be found in the table below.

Month	Avg Precip [a] (in.)	Avg Temp [a] (ºF)	Max. Temp [a] (ºF)	Min. Temp [a] (ºF)	ETo [b] (in)
January	4.4	46	73	17	1.59
February	3.8	51	78	19	2.2
March	3.9	54	86	26	3.66
April	1.9	59	94	30	5.08
May	0.6	65	106	35	6.83
June	0.2	72	112	43	7.8
July	0.1	77	115	50	8.67
August	0.1	77	114	45	7.81
September	0.5	73	108	46	5.67
October	1.5	66	102	32	4.03
November	3.4	54	86	26	2.13
December	3.5	47	74	16	1.59
Annual	23.92	62	115	16	57.06

[a] Source: CIMIS database, Fair Oaks Station No. 131, period of record 1997 to 2008
[b] Source: Western Region Climate Center's Folsom Dam, California Station No. 043113, period of record 10/26/1955 to 4/30/1993

Predominant wind direction: According to the online CIMIS database, at Fair Oaks Station No. 131, District average wind velocity is 3.8 mph. The prevailing wind in Sacramento is southerly all year. This is due to the north-south orientation of the valley and the deflecting effects of the towering Sierra Nevada on the prevailing oceanic wind that moves through the Carquinez Strait near the Delta, at the junction of the Sacramento and San Joaquin Rivers. No other tidewater gap exists in the Coastal Mountains to admit significant marine air into the Sacramento or the San Joaquin Valleys. Occasionally, a strong north or northeasterly barometric pressure gradient develops, forcing air south or southwestward down the Siskiyou Mountains or the Sierra Nevada. This air is warmed by compression as it descends, reaching the valley floor as a hot, dry north wind. Heat waves in the summer are produced by these winds and fortunately, are usually followed within two or three days by the normally cool southwest delta breezes, especially at night.

Summer nights in the Southern Sacramento Valley are usually pleasant. This is primarily the result of the refreshing breezes blowing up from the San Francisco Bay through the delta. The exception is when the north or northeasterly pressure difference develops during heat waves, causing light northerly breezes to continue through the night.

Average annual frost-free days: According to the Western Region Climate Center's Folsom Dam, California Station No. 043113 for period of record 10/26/1955 to 4/30/1993, there are on average 13 days with temperatures below 32 degrees Fahrenheit. The number of average annual frost-free days is 352.

2. Impact of any microclimates on water management within the service area

There are no known microclimates within the District's service area and, therefore, microclimates have no known impact on water management.

E. Natural and Cultural Resources

The District has two recreational State parks within its boundaries as well as numerous community parks. Granite Bay and Beals Point are State recreational parks located on the northwesterly and western access points to Folsom Lake. The District serves both areas on a metered commercial basis.

1. Natural resources area within the service area

Name	Estimated Acres	Description
Baldwin Reservoir	45	Wetlands enhancement project with wildlife, vernal pools, reservoir, marshlands, and wooded areas.
Linda Creek, Miners Ravine	1	Small creeks that originate at natural ponds and run through residential areas in the District.
Heritage Oak trees (includes Valley Oaks, Live Oaks and Blue Oaks)	N/A	Located throughout the District; many on private residential property

2. Description of District management of these resources in the past or present

Baldwin Reservoir Enhancement Project. Under the strain of scarce resources and unprecedented demands for water and other natural resources, society is shifting in terms of where it places value on these resources. This shift in values affects those responsible for meeting water demands of current and future water users.

The Baldwin Reservoir Wetlands Enhancement Project is located on a 45-acre site approximately 1,000 yards west of the District office in Granite Bay, California, this project is also the result of a unique partnership formed between the District, the community, and a local developer.

The history begins with the District's 100 million gallon Baldwin Reservoir, constructed in 1928, which was drained and retired from use in the early 1970's. The federal government, under the Clean Water Act, required all potable water reservoirs to be lined and covered. The District, limited in funds, made a decision to drain the reservoir and re-activate its use in the future when it could afford to do so.

In 1989, the District seriously considered constructing a 100-200 million gallon reservoir on the old Baldwin site. By this time, the site had emerged as a low value wetlands area. Wetlands protection was in full bloom and requirements for a 404 permit were determined to be necessary for this project.

Following a series of public hearings, the Board of Directors made a decision to abandon the plan for construction of a reservoir at the Baldwin site and look for a way to preserve or enhance the site for future generations.

The District announced its intention to abandon the project and convert the area over to a wetlands park. A developer read about the project in a newspaper article and, in 1992, made an offer to master plan a high value wetlands area to mitigate a project that he was developing.

Allowing a developer to use the public land for off-site mitigation purposes resulted in the creation of a wetlands area of high value to the master-planned environment. The community was involved, from inception to completion, through a public hearing process. This project was embraced by the community and has been successful in further strengthening the District's public relations.

Viewed by the public as a positive contribution to future generations, this important project included an enlarged water impoundment, the creation of islands to enhance nesting for water fowl, marshlands additions, seasonal vernal pools, upland wooded areas, and an extensive planting of riparian habitat. More than 1,600 on-site plantings, of which more than 900 are trees, have been carefully planned into the project. The developer spent $350,000 to complete the project.

3. Recreational and/or cultural resources areas within the service area

Name	Estimated Acres	Description
State Parks	332	Boating, picnic areas, camping, swimming, beaches
Community Parks	10	Tennis courts, picnic areas, playgrounds
Miners Ravine Nature Reserve	25	Wildlife and bird sanctuary

F. Operating Rules and Regulations

1. Attach a copy of the contractor's operating rules and regulations.

The District operates under the rules and regulations set forth in the Code of Ordinances, adopted July 28, 2006, and amended August 1, 2008. A copy of the table of contents of the District's Code of Ordinances can be found in Appendix B.

2. Agricultural water allocation policy.

The District does not provide agricultural water.

3. Official and actual lead times necessary for water orders and shut-off (Agric only)

The District does not provide agricultural water. Urban water is delivered on demand and there are no special ordering procedures.

4. Policies regarding surface and subsurface drainage from farms (Agric only)

The District does not provide agricultural water.

5. Policies on water transfers by District and its customers.
The District does not have any specific policies on water transfers. The Wholesale District holds all of the water rights, and the Board makes decisions on a case-by-case basis.

G. Water Measurement, Pricing, and Billing

Agricultural Customers

The District does not provide agricultural water.

Urban Customers

1. *Total number of connections:* 10,346 meters for San Juan retail service area and 33 wholesale meters to other agencies

2. *Total number of metered connections:* 10,379

3. *Total number of connections not billed by quantity:* 0

4. *Percentage of water that was measured at delivery point:* 100

5. *Percentage of delivered water that was billed by quantity:* 100

SJWD retail is completely metered and all customers are billed by quantity.

6. *Measurement device table*

Retail:

Meter Size and Type	Number	Accuracy (+/- %)	Reading Frequency (Days)	Calibration Frequency (Months	Maintenance Frequency (Months
< 1" [a]	10,053	98-100%	Approx. 60	As Needed	As Needed
1 ½"	105	98-100%	Approx. 60	As Needed	As Needed
2"	158	98-100%	Approx. 60	As Needed	As Needed
3"	26	98-100%	Approx. 60	As Needed	As Needed
4"	3	98-100%	Approx. 60	As Needed	As Needed
6"	1	98-100%	Approx. 30	As Needed	As Needed
8"	0	--	--	--	--
10"	0	--	--	--	--
Compound	0	--	--	--	--
Turbo	0	--	--	--	--
Total	10,346	--	--	--	--

[a] 5/8" and ¾" meters are included in this category because they are billed at the 1" rates using a standardized billing code.

Wholesale:

Meter Size and Type[a]	Number	Accuracy (+/- %)	Reading Frequency (Days)	Calibration Frequency (Months	Maintenance Frequency (Months
Insertion magnetic meters (12"-72")	33	75-80%	Hourly per SCADA	As Needed	As Needed

[a] By May 2009 new magnetic flow meters will be installed at all wholesale meter reading locations. These meters will have a 98% accuracy.

Agriculture and Urban Customers

1. *Current year agriculture and/or urban water charges – including rate structures and billing frequency*

The District does not have any agriculture water charges. The District's 2008 and 2009 rate structure is attached in Appendix C, with sample water bills attached in Appendix D. Customers are billed according to residential or commercial status. All the District's retail customers are metered, and based on their meter size, pay a daily base charge with increasing block. Commercial private fire lines only pay a fixed daily base charge.

In accordance with federal law, the District's wholesale customers are installing meters and phasing in a mandatory metered rate structure for all customers. At this time, Fair Oaks Water District is partially metered, and Citrus Heights Water District, Ashland area of City of Folsom, and Orange Vale Water Company are fully metered.

2. *Annual charges collected from customers (2008 data). San Juan Water District's billing software totals the fixed and volumetric charges under one General Ledger and does not list tiers separately. The following table has been modified to calculate the total.*

CALENDAR YEAR ENDING DECEMBER 31, 2008

RESIDENTIAL CONNECTIONS

Type of Charge		Charge Amounts	Charge Units	Units billed during year	$ Collected
Fixed Charge	1" Meter	$0.97	Daily base charge	365 days x 9,877 connections (at year end)	$7,663,684.37 Total Residential (our system does not differentiate between fixed charge and volumetric charge revenue.)
	1.5" Meter	$2.58	Daily base charge		
	2" meter	$4.12	Daily base charge		
Volumetric Charge (tiered)	0-20 units	$0.37	ccf	244,288 units total (our system does not break this down by tier)	
	21-200 units	$0.62	ccf		
	200+ units	$0.44	ccf		

NON-RESIDENTIAL CONNECTIONS

Fixed Charge	1" Meter	$0.97	Daily base charge	365 days x 468 connections (at year end)	$1,128,835.69 Total Non-Residential (our system does not differentiate between fixed charge and volumetric charge revenue.)
	1.5" Meter	$2.58	Daily base charge		
	2" meter	$4.12	Daily base charge		
	3" Meter	$8.19	Daily base charge		
	4" Meter	$12.77	Daily base charge		
	Fire Districts	$4.96	Daily base charge		
Volumetric Charge (no tiers)	1+ units	$0.53	ccf	24,177 units total	

RAW WATER

Volumetric	Metered	$36.14	Acre Feet	382.04	$13,806.93

1. Water-use data accounting procedures

See Appendix D for sample bills from the District.

The District reads its meters every two months and tries to adhere to a fairly consistent 60-day meter reading period. Approximately one-half of the district's meters are read in alternating months. Meters are generally read between the first and third week of every month. The account activity portion on the customer's bill shows meter reads, meter read dates, number of days in service period and total consumption in units (1 unit = 100 cubic feet = 748 gallons.) The amount due portion of the customer bill indicates the base charge, tier totals for consumption, and total amount owed. Usage history is included on the back of every bill, helping customers compare and track water use from billing period to billing period and seasonal use from year to year. Customers can also call the District and request their consumption data at any time.

The District does not provide agricultural water.

H. Water Shortage Allocation Policies

1. Current year water shortage policies or shortage response plan - specifying how reduced water supplies are allocated

Working with its wholesale customers, San Juan Water District's Surface Water Supply and Water Shortage Plan (Plan) was developed and implemented by all retail member agencies to provide a reliable water supply for its wholesale and retail customers during seasonal, climatic, or other unforeseen shortages of surface water. Adopted in 2008, this plan was based on a conjunctive use program with groundwater being used to supplement any reduction in surface water to supply the appropriate level of service during a shortage condition. Key to the implementation of this Plan is the fact that San Juan manages its water supplies for the wholesale customers at a total supply level; therefore, this Plan together with the water supply contracts with the wholesale agencies provides the basis for San Juan to administer and implement the Plan during shortage conditions, using groundwater and surface water to provide the agreed upon level of service to each agency. The District has established a five-level water shortage contingency plan. Each level is assigned usage goals with established supply conditions that trigger implementation. The contingency plan also identifies and prioritizes water uses to support water shortage policies. The District's water shortage Mandatory Requirements and San Juan Water District's Surface Water Supply and Water Shortage Plan are in Appendix E of this document.

The District has the following stages and corresponding reductions in place to occur during water shortage conditions.

Stage		Reduction amount
1.	Normal Water Supply	0%
2.	Water Alert	5 to 10%
3.	Water Warning	11 to 25%
4.	Water Crisis	26 to 50%
5.	Water Emergency	Greater than 50%

The District's maximum dry year surface water supply cutback is down to 54,200 acre-feet per year in all but the worst-case dry years based on their Water Forum Agreement. The District's remaining supply needs during dry years is met by increased groundwater pumping from the Family Agencies.

2. Current year policies that address wasteful use of water and enforcement methods

As part of the California Urban Water Conservation Council's (CUWCC) 14 Best Management Practices (BMPs), the District implemented, among others, BMP 13, Water Waste Prohibition and Enforcement. The District's water waste measures allow for monitoring and inspection by District staff, and gives District authority to enforce ordinance through increasing levels of response, up to connection termination. See Appendix F for Ordinance 11000, Prohibited Practices and Enforcement Measures from the District's Code of Ordinances.

Section 2: Inventory of Water Resources

A. Surface Water Supply

1. Acre-foot amounts of surface water delivered to the contractor by each of the District's sources

See Water Inventory Tables, Table 1

2. Amount of water delivered to District by each of the District sources for the last 10 years

See Water Inventory Tables, Table 8

B. Groundwater Supply

1. Acre-foot amounts of groundwater pumped and delivered by the District

See Water Inventory Tables, Table 2

2. Ground-water basin(s) that underlies the service area

Due to poor water-bearing geological formations, the District has no groundwater supply, wells, or groundwater recharge areas within the retail service area. However, the District is currently working towards a Regional Water Master Plan which includes conjunctive use. The District is anticipating

further discussions with the purpose of expanding conjunctive use and augmenting groundwater supplies.

In 1991, the District entered into a memorandum of understanding with its wholesale customers (Fair Oaks Water District, Citrus Heights Water District, and Orange Vale Water Company) for the purpose of groundwater well field development. The basis of the memorandum of understanding was that San Juan Water District would fund the well field development project with funds from 1979 Water Bonds. Wells developed would be owned, operated, and maintained by the respective agencies. Under emergency water conditions, the benefits of the additional supply from the new wells would be shared.

The following table represents data on the groundwater basin underlying the entire area north of the American River per California's Groundwater Bulletin Update in 2003.

Name	Size (Square Mile)	Storage Capacity (AF)	Safe Yield (AF/Y)
Sacramento Valley, North American Sub basin (5-21.64)	548	4,900,000	Not determined

Source: California's Groundwater Bulletin 118 Update 2003.

Map of District operated wells and managed groundwater recharge areas

The District and its retailers work informally to utilize surface water supplies in-lieu of pumping groundwater. There are no District-operated groundwater recharge areas. Of the District's wholesale customers, Citrus Heights Water District and Fair Oaks Water District have groundwater wells.

3. Description of conjunctive use of surface and groundwater.

The District's retailers strive to utilize available surface water supplies from the District during normal and wet years through the distribution system capacities before pumping groundwater to meet demand. This is an informal arrangement and there are no contractual obligations.. During dry years when surface water supplies may be reduced, groundwater will be pumped to meet demand.

4. Ground Water Management Plan

The Sacramento Groundwater Authority, of which the District is a member, adopted a revised Groundwater Management Plan in December 2008. A copy can be obtained from SGA directly. Appendix G contains a copy of the cover of the Groundwater Management Plan which can also be found on the internet at http://www.sgah2o.org/sga/files/2008-SGA-GMP-FINAL-20090206-print_ready.pdf.

5. Ground Water Banking Plan

The Sacramento Groundwater Authority is currently developing a Water Accounting Framework which includes a model ground-water banking program element. The program is not yet completed.

C. Other Water Supplies

1. "Other" water used as part of the water supply

There are no "Other" sources for water as identified in Table 1.

D. Source Water Quality Monitoring Practices

1. Potable Water Quality (Urban only)

There are no current or historic surface water quality problems. The 2007 Annual Water Quality Report is attached in Appendix H, and reports both surface water and groundwater quality testing results. There are no current water quality concerns and/or problems.

2. Agricultural contractors concerns: *Yes* ____ *No* __x__

Not applicable. The District does not provide agricultural water.

3. Description of the agricultural water quality testing program and the role of each participant, including the district, in the program

4. Current water quality monitoring programs for surface water by source (Agric only)

The District does not provide agricultural water.

Analyses Performed	Frequency Range	Concentration Range	Average
N/A			

Current water quality monitoring programs for groundwater by source (Agric only)

E. Water Uses Within the District

1. Agricultural - See Water Inventory Tables, Table 5 - Crop Water Needs

The District does not provide agricultural water.

2. Types of irrigation systems used for each crop in current year

The District does not provide agricultural water.

Crop name	Total Acres	Basin - acres	Furrow - acres	Sprinkler - acres	Low Volume - acres	Multiple methods - ac
N/A						

3. Urban use by customer type in current year

Customer Type	Number of Connections	Year 2008 Use (AF)
Retail service area		
Single-family	9,756	12,592
Multi-family	121	234
Commercial	223	378
Industrial	0	0
Institutional	11	246
Landscape irrigation	234	1,195
Reclaimed	0	0
Other [a]	1	382
Unaccounted for	N/A	2,420
Retail service area total	**10,346**	**17,447**
Wholesale system[b]		
Citrus Heights Water District	--	17,036
Fair Oaks Water District	--	10,534
City of Folsom	--	1,608
Orange Vale Water Company	--	4,703
Wholesale system total	**--**	**33,881**
Total	**10,346**	**51,328**

[a] Other includes raw water delivered to the Granite Bay Golf Course.
[b] Wholesale system information based on 2008 SJWD plant for summary data from file titled *02-01-09 1979 thru present - flow summary report.xls*

Urban Wastewater Collection/Treatment Systems serving the service area

The District has no wastewater collection or treatment systems.

Wastewater generated in the District's service areas is collected and treated at two locations. Wastewater from the service area in Placer County is generally collected by Placer County and the City of Roseville and treated at the City of Roseville's Dry Creek Wastewater Treatment Plant (Dry Creek WWTP). Wastewater from the service area in Sacramento County is generally collected and treated by the Sacramento Regional County Sanitation Districts (SRCSD). The one main exception is that the City of Folsom, who is responsible for the collection system within the City prior to discharge to SRCSD's interceptor system. Most of the local water agencies are in coordination with the City of Roseville and SRCSD regarding various issues such as water efficiency methodologies, rebates, reuse potential, and other issues. The District has no authority or control over municipal wastewater generated in the District's area. The District also currently has no authority of reuse in its area, and there is no reuse water available in its service area. However, the local water purveyors understand reuse will become an important element of integrated water supply planning and support the development of a reuse supply component.

Both the City of Roseville and SRCSD are currently conducting reuse studies or planning efforts. The SRCSD study is a more detailed investigation of reuse potential for the region and is expected to develop a list of reuse projects to begin planning and design. The City of Roseville has completed

a reuse study and is implementing infrastructure improvements to increase reuse. Both efforts involve the coordination, updates, and input from individual local water districts, and from the regional water agencies, the Regional Water Authority (RWA), and the Sacramento Groundwater Authority (SGA).

The wastewater generated in Sacramento County is collected by gravity in a series of main, trunk, and interceptor sewers owned and operated by SRCSD. Collected wastewater is transported to the SRCSD in Elk Grove. The regional plant serves the entire Sacramento metropolitan area including the unincorporated county area adjacent to the City of Sacramento, the City of Citrus Heights, and the City of Folsom. The treatment plant receives and treats approximately 156 mgd (2004) of dry weather flow on average. The current capacity of the plant to treat dry weather flows is approximately 181 mgd. The treatment plant produces a disinfected secondary effluent that is discharged into the Sacramento River below Freeport. The principal treatment processes are primary sedimentation, pure-oxygen activated sludge, secondary sedimentation, and chlorination/de-chlorination. Disposal methods and quantities are presented in the following table.

The City of Roseville owns and operates two treatment plants, although all the wastewater generated within the District's service area in Placer County is treated at the Dry Creek WWTP. The Dry Creek plant has a current capacity of 18 mgd dry weather flow and produces disinfected tertiary treated water.

Treatment Plant	Treatment Level (1, 2, 3)	AF	Disposal to / uses
SRCSD	Secondary effluent	152,000	River discharge
SRCSD	Title 22	3,360	Reuse
Dry Creek WWTP	Title 22	9,958	Creek Discharge
Dry Creek WWTP	Title 22	1,390	Reuse
	Total	166,708	
Total discharged to ocean and/ or saline sink		0	

Source: 2008 SRCSD data based on 136 mgd of SRWTP discharge and range of up to 3mgd tertiary effluent provided by Jose Ramirez, SRCSD. 2008 Dry Creek WWTP data provide by Ken Glotzbach, City of Roseville.

4. *Ground water recharge / management / banking in current year (Table 6)*

Recharge Area	Method of Recharge	(AF)	Method of Retrieval
N/A			
	Total		

The Sacramento Groundwater Authority has completed the previously referenced Groundwater Management Plan, and is currently working on a Groundwater Banking Plan.

5. *Transfers and exchanges into or out of the service area in current year (Table 6)*

The District has made no transfers or exchanges in the current year. The District engaged in wholesale sales to its retail agencies. Note that the following water, although listed as a "transfer", is not a contractual transfer of water rights, but wholesale water service.

From Whom	To Whom	Year	(AF)	Use
District	Orange Vale WD	2008	4,703	Retail
District	Citrus Heights WD	2008	17,036	Retail
District	Fair Oaks WD	2008	10,534	Retail
District	City of Folsom	2008	1,608	Retail
District	San Juan WD (Retail)	2008	17,063	Retail

6. *Trades, wheeling, wet/dry year exchanges or other transactions in current year (Table 6)*

Note that the following water is not a contractual wheeling of water rights. The District provides the infrastructure and water treatment plant capacity for the treatment and wheeling of PCWA water supplied to Sacramento Suburban WD.

From Whom	To Whom	Year	(AF)	Use
District	Sacramento Suburban Water District	2008	12,206	Retail
District	City of Roseville	2008	8	Retail

7. *Other uses of water*

Other Uses	Year	AF
N/A		

F. Irrigation Drainage from the Service Area (Ag only)

1. *Surface and subsurface drain/return flows*

The District does not provide agricultural water. Primary drainage points from the District are through the Baldwin Reservoir to Linda Creek through sub-surface drainage to the American River, located south of the District. Drainage maps of the area indicate sub-surface drainage flows in a south and southwesterly direction from the District. Amounts and quality of drainage is not measured.

2. *Description of the Drainage water quality testing program and the role of each participant in the program*

There is no significant agriculture drainage and therefore it is not tested.

3. Drainage Water (surface and subsurface) Quality Testing Program
Not applicable.

4. Usage limitation resulting from the drainage water quality
Not applicable.

G. Water Accounting (Inventory

1. *Water Supplies Quantified*
   a. *Surface water supplies, imported and originating within the service area, by month (Table 1)*
   b. *Ground water extracted by the district, by month (Table 2)*

c. Effective precipitation by crop (Table 5)
d. Estimated annual ground water extracted by non-district parties (Table 2)
e. Recycled urban wastewater, by month (Table 3)
f. Other supplies, by month (Table 1)

2. *Water Used Quantified*
   a. Agric. conveyance losses, including seepage, evaporation, and operational spills in canal systems (Agric. Table 4) or Urban leaks, breaks and flushing/fire uses in piped systems (Urban Table 4)
   b. Consumptive use by riparian vegetation or environmental use (Table 6)
   c. Applied irrigation water - crop ET, water used for leaching / cultural practices (e.g., frost protection, soil reclamation, etc.) (Table 5)
   d. Urban water use (Table 6)
   e. Ground water recharge (Table 6)
   f. Water exchanges and transfers (Table 6)
   g. Estimated deep percolation within the service area (Agric. Table 6)
   h. Flows to perched water table or saline sink (Agric. Table 7)
   i. Irrigation spill or drain water leaving the District (Agric. Table 6)
   j. Other

3. *Overall Water Inventory*
   a. Table 6

H. Assess Quantifiable Objectives

There are no Quantifiable Objectives that apply to the District.

TABLE 1

Year of Data: 2008 — Enter data year here

Table 1

Surface Water Supply

2008 Month	Federal Urban Water (acre-feet)	Federal Agric. Water (acre-feet)	State Water (acre-feet)	Local Water (acre-feet)	Other Water (define) (acre-feet)	Total (acre-feet)
January	0	0	0	271	1,445	1,716
February	0	0	0	266	1,370	1,636
March	0	0	0	571	2,407	2,979
April	0	0	0	1,054	3,559	4,613
May	53	0	0	1,575	4,612	6,240
June	658	0	0	1,842	4,463	6,963
July	827	0	0	2,027	4,612	7,466
August	825	0	0	1,990	4,612	7,427
September	130	0	0	1,680	4,463	6,273
October	1,818	0	0	1,146	1,458	4,422
November	1,820	0	0	434	0	2,254
December	1,600	0	0	328	0	1,929
TOTAL	7,733	0	0	13,183	33,000	53,917

The calculations contained in this table may not always result in a precise sum due to rounding.

TABLE 2

Table 2

Ground Water Supply

2008 Month	District groundwtr (acre-feet)	Private GW* (acre-feet)
January	0	0
February	0	0
March	0	0
April	0	0
May	0	0
June	0	0
July	0	0
August	0	0
September	0	0
October	0	0
November	0	0
December	0	0
TOTAL	0	0

*normally estimated

TABLE 3

Table 3

Total Water Supply

2008 Month	Surface Water Supply (acre-feet)	District Groundwater (acre-feet)	Recycled M&I Wastewater* (acre-feet)	Total District Water Supply (acre-feet)
January	1,716	0	0	1,716
February	1,636	0	0	1,636
March	2,979	0	0	2,979
April	4,613	0	0	4,613
May	6,240	0	0	6,240
June	6,963	0	0	6,963
July	7,466	0	0	7,466
August	7,427	0	0	7,427
September	6,273	0	0	6,273
October	4,422	0	0	4,422
November	2,254	0	0	2,254
December	1,929	0	0	1,929
TOTAL	53,917	0	0	53,917

* Recycled wastewater is treated urban wastewater that is reused
The calculations contained in this table may not always result in a precise sum due to rounding.

TABLE 4

Table 4

Distribution System

2008 Area or Line	Length (feet)	Leaks [1] (acre-feet)	Breaks (acre-feet)	Flushing/Fire [2] (acre-feet)	Total (acre-feet)
Retail	1,072,261	2,802	0	671	3,473
Wholesale [3,4]	40,184	2,200	0	0	2,200
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
	0	0	0	0	0
TOTAL	1,112,445	5,002	0	671	5,673

Note: This table contains the distribution system information for the SJWD retail system and the wholesale distribution system. These are two separate delivery systems.

[1] Leaks retail estimate includes 138.24 AF of discovered leaks . This is based on the "Potential Water System Leaks" in System Audit 2008 (retail) and UAW to make-up total 2802 AF non-revenue water from 2008 retail summary report.

[2] Flushing/Fire column includes firefighting, main flushing, storm drain flushing, sewer cleaning, street cleaning, construction sites/hydrant, water quality and other testing, process water at treatment plants, other unmetered areas, reservoir seepage and leakage, evaporation,

[3] Pipes in wholesale distribution system with diameters > 30" are assumed Wholesale piping.

[4] Master meters for wholesale customers are downstream of the District's master meter. During a study conducted this past winter (2008) it was learned that the wholesale customers' master meters are extremely inaccurate (up to 35%). Wholesale leak estimate is based on caculated production and delivery differences. The District plans to replace the wholesale customer meters with highly reliable meters over the next year. Accurate meter readings should be available in 2010, and at that time an accurate water audit for the wholesale system can be completed.

TABLE 6

Table 6

2008 District Water Inventory

			Retail	Wholesale [1]
Water Supply	Table 3		17,063	36,844
Environmental Consumptive Use [1]		minus	365	0
Groundwater Recharge	(Perc ponds & recharge wells)	minus	0	0
Water Exchanges or Transfers	(into or out of the district)	minus / plus	0	0
Flushing / Fire	Table 4	minus	671	0
Distribution System Leaks & Breaks	Table 4	minus	138	2,963
Non-Urban (Agricultural) Deliveries	<2,000 AF	minus	0	0
	Water Supply Available for Sale		15,889	33,881
2008				
Actual M&I Water Sales		**From District Records**	**14,644**	N/A
Inside Use	Feb use x 12	minus	4,050	N/A
Landscape / Outside Use	(calculated)		10,594	N/A

1 Estimated water released to Baldwin Reservoir. Average release is 1.0 AF per day.

Wholesale customers include:Folsom, CHWD, FOWD, and OVWC. This does not include the water wheeled to SSWD.

TABLE 8

Table 8

Annual Water Quantities Delivered Under Each Right or Contract

Year	Federal Urban Water (acre-feet)	Federal Agric. Water (acre-feet)	State Water (acre-feet)	Local Water (acre-feet)	Other Water (define) (acre-feet)	Total (acre-feet)
1999	11,065	0		10,800	33,000	54,865
2000	9,665	0		11,022	33,000	53,687
2001	12,064	0		12,156	33,000	57,220
2002	6,896	0		13,368	33,000	53,264
2003	8,905	0		13,148	31,953	54,006
2004	11,228	0		13,988	33,000	58,217
2005	7,741	0		12,511	33,000	53,253
2006	10,464	0		11,370	33,000	54,834
2007	8,003	0		12,726	33,000	53,729
2008	7,733	0	0	13,183	33,000	53,917
Total	93,764	0	0	124,273	328,953	546,990
Average	9,376	0	0	12,427	32,895	54,699

* 1999 thru 2003 data from previous 2004 USBR WMP. 2005 -2007 data from SJWD 02-01-09 flow summary report.

The calculations contained in this table may not always result in a precise sum due to rounding.

Section 3: Best Management Practices (BMPs) for Agricultural Contractors

There are no irrigation contractors within the District.

Section 4: BMPs for Urban Contractors

A. Urban BMPs

The 2007 and 2008 annual California Urban Water Conservation Council (CUWCC) reports are included in Appendix I.

The District's to-date CUWCC retail and wholesale system BMP coverage requirements are located in Appendix J, CUWCC BMP Coverage Report. Coverage requirements are the expected level of implementation necessary to achieve full implementation of BMPs. Coverage requirements are expressed in terms of activity levels and as water savings achieved.

In previous years the District accomplished a certain number of targeted BMP interventions per year per USBR and CUWCC intervention implementation goals. In upcoming years, however, the District has decided to focus on achieving water savings (as opposed to interventions) and will follow the CUWCC's Flex Track menu. This menu focuses on residential, CII, and landscape water savings goals. As a CUWCC Memorandum of Understanding (MOU) signatory, SJWD has elected to implement additional or alternative measures, in part or in any combination, as described in the Flex Track menus, that have demonstrated water savings that are equal to or greater than the water savings that would be achieved by the individual BMP measures (as performed in previous years).

As indicated by their projected annual budgets, the District will continue implementing the Foundational BMPs: utility operations programs and education programs. The District revised their strategy for implementing the Programmatic BMPs focused on each of the residential, commercial, and landscape customer use categories, per the CUWCC's MOU revised in December 2008. Residential interventions will include former BMP 1, 2, 6 and 14 activities in addition to other residential water savings initiatives. Commercial interventions will include formerly designated BMP 9 activities in addition to any other commercial water savings initiatives. Landscape interventions will include BMP 5 initiatives in addition to other landscape water saving activities. The CUWCC revised MOU Programmatic BMP categories are summarized below.

New BMP Category		Former BMP Name
1	Utilities Operations	
1.1	Operations Practices	BMP 13. Water Waste Prohibition BMP 12. Conservation Coordinator BMP 10. Wholesale Agency Assistance Program
1.2	Pricing	BMP 11. Conservation Pricing
1.3	Metering	BMP 4. Metering with Commodity Rates for all New Connections and Retrofit of Existing Connections
1.4	Water Loss Control	BMP 3. System Water Audits, Leaks, Detection, and Repair
2	Education	
2.1	Public Information Programs	BMP 7. Public Information
2.2	School Education	BMP 8. School Education

New BMP Category		Former BMP Name
3	Residential	BMP 1. Water Survey Programs for Single-Family and Multi-Family Residential Customers BMP 2. Residential Pluming Retrofit BMP 6. High-Efficiency Washing Machine Rebate Programs BMP 14. Residential ULFT Replacement Programs Flex Track Irrigation Efficiency Program*
4	CII	BMP 9. Conservation Programs for CII Accounts
5	Landscape	BMP 5. Large Landscape Conservation Programs and Incentives

*This is a new Flex Track Program for residential Irrigation Efficiency.

To date, the CUWCC has not yet determined overall agency water savings goals and has yet to publish online reporting forms to track status of achieving these goals. The District will be following the previously implemented standard BMPs in most cases except for reducing BMP 6, residential high efficiency clothes washer rebates, implementation activity in order to expend more effort on achieving greater savings with a new Flex Track approach to residential irrigation efficiency. The following section presents historical and estimated projected activity by BMP. Projected activity by BMP is based on the District's Water Conservation Master Plan technical analysis of BMP intervention requirements to comply with the CUWCC MOU. This analysis was conducted by Brown and Caldwell in 2006. Also presented in this section is the projected activity and savings for the enhanced residential irrigation efficiency program at SJWD. A savings analysis is shown that exhibits the water savings of this new irrigation efficiency program as compared to the original BMP 6 implementation target.

The District is in the process of determining their water efficiency program implementation. For this report, the District is meeting the implementation goals based on interventions and active program implementation. Once the CUWCC determines the overall District water savings goal the District may adjust and refine their program to achieve the required savings.

Foundational BMP 1. Utility Operations Programs
1.1 Operations Practices

(Former BMP 13. Water Waste Prohibition)
Program Description-
The District has a water waste prohibition that prohibits gutter flooding, non-recirculating systems in decorative fountains and evaporative coolers, and unnecessary/wasteful uses of water. District conservation staff respond to all water waste complaints and requests for assistance from customers. They show customers how to improve system performance and water efficiency. In some cases, staff repair minor leaks for customers, which is a no cost service included in the conservation budget. The water waste prohibition is part of the San Juan Water District Code of Ordinance attached in Appendix F

(Former BMP 10. ***Wholesale Agency Assistance Programs****)*

Program Description-

The District is a wholesaler water district as well as a retail water district. The District provides technical support through workshops on CUWCC BMP procedures and residential and large turf irrigation, and by serving as a technical resource for BMPs 5, 7, 8, 11, 12, and 13. The District provides program management support for BMPs 5, 7, 8, 10, and 12. The District provides a water-efficient demonstration garden for the public. Extensive improvements were made to the garden in 2003-2004. In addition, an extensive video library, speakers for school presentations, and coordination of the annual water-awareness poster contest.

The District's wholesale agencies are all members of the RWA. RWA applies for regional grants and administers public outreach and school education campaigns that satisfy the requirements of the respective BMPs. RWA also holds bi-monthly technical sessions where new technologies and program implementation methods and practices are shared, reviewed, and discussed. In addition, District staff attends CUWCC workshops and meetings on behalf of member agencies. When retail agencies have questions they call the District and staff assists with any BMP/reporting concern they might have.

Implementation Monitoring. The District will monitor information in the table above and report in the annual BMP reports.

(Former BMP 12. Conservation Coordinator)

The District has established a conservation coordinator position whose duties include the following:

- Coordination and oversight of conservation program and BMP implementation
- Preparation and submittal of the CUWCC BMP Implementation Report
- Coordination of water efficiency efforts and programs with District executive team, other staff, and other agencies.
- Preparation of annual BMP budgets.
- Participation in CUWCC meetings.
- Preparation of conservation elements in the District' Urban Water Management Plan.

Contact Name: Vicki Sacksteder **Title:** Water Resources Analyst
Telephone: 916- 791-6933 **E-mail**: vsacksteder@sjwd.org

Foundational BMP 1. Utility Operations Programs
1.2 Pricing

(Former BMP 11 - Conservation Pricing)

Program Description-

All accounts are metered and billed on a metered rate. According to the CUWCC Coverage Report found in Appendix J the District has met the coverage requirements for this BMP.

Implementation Monitoring. The District reports BMP 11 information in the annual BMP reports.

Foundational BMP 1. Utilities Operations Programs
1.3 Metering

(Former BMP 4. Metering with Commodity Rates for all New Connections and Retrofit of Existing Connections)
Program Description-
The District requires meters for all new connections as of July 1997, and bills on a volume basis for all commercial, institutional, and landscape irrigation customers, as well as some single- and multi-family customers. The District began installing meters in 1986 and is currently 100% metered.

The District is working on the formal development of a meter testing and replacement program.

Implementation Monitoring. All connections are currently metered and billed on a metered rate.

Number of unmetered connections 0
Number of connections not billed by quantity 0

Foundational BMP 1. Utilities Operations Programs
1.4 Water Loss Control

(Former BMP 3. System Water Audits, Leaks, Detection, and Repair)
Program Description-
Leak detection methods include monitoring of zone usage, zone pressure, and surface conditions. Repairs are made on an as-needed basis. The District has a Capital Improvement Program (CIP) that extends to 2030 and includes a main line replacement program that is in effect and executed through a contract with Utility Service Association, Inc. who also conduct leak surveys where suspected excessive leakage exists. Additionally, the District conducts distribution system water audits every three years.

The San Juan Water District has an active leak detection program. For the past five years, the District has contracted with an electronic leak detection service to survey large sections of our service area. This year they detected 8 leaks, varying in flow from 0.68 gpm to 48 gpm. This small number of leaks is a typical finding. Leaks are also detected by our field crews, customers, other utilities and public works departments, and our meter reader. All leaks are repaired immediately. To date, we have discovered a total of 72 leaks for a loss of approximately 23 million gallons.

Additionally, in 2009, new magnetic flow meters will be installed throughout our wholesale system at a cost of $4.7 million. We expect an exceedingly high accuracy of the new meters at plus or minus 0.2%. By 2010 we will be able to complete a full system audit, which will allow us to determine "non-revenue water" very accurately. This number will help determine the cost/benefit ratio and justify the level of further leak detection efforts.

Implementation Monitoring. The District monitors and maintains data per the BMP requirements.

Enter the AF of water purchased and lost in the past and the projected amount in future years

	*2007***	*2008***	*2009*	*2010*	*2011*	*2012*	*2013*
Total Water, AF	53,466	65,741***	65,094*	64,447*	64,796*	65,144*	65,493*
Unaccounted for, AF	2,159	1,798	2,604	2,578	2,592	2,606	2,620
% UAW	4	3	*Assumed 4% *****				

* Source: Year 2010 and 2015 projection estimates from SJWD – Wholesale Master Plan (Black and Veach, 2007). In between years assume linear growth.
**According to the CUWCC Coverage Report found in Appendix J the District has met the coverage requirements for this BMP through 2008.
***The increase in Total Water from 2007 to 2008 is due to a change in methodology for reporting these amounts.
****The UAW is assumed to be 4% based on historical UAW for total water production. Total water production used in this table includes the wholesale water deliveries loss ratio. The UAW estimated for the retail distribution system (8%) is not used in this table because the total water production in this table includes wholesale and wheeling deliveries.

Foundational BMP 2. Education
2.1 Public Information Programs

(Former BMP 7. Public Information Programs)
Program Description-
The District will continue to implement a public information program through participation in the Regional Water Authority (RWA) lead Regional Water Efficiency Program and through the following methods:

- Generating newspaper articles on water saving techniques as well as water efficiency and conservation information.
- Maintaining an extensive literature collection and video library providing landscape and water-related resources available to students, teachers, and our customers.
- Providing public information booth with water efficiency and conservation information at related fairs and events.
- Participating in special events and media events to promote water efficiency and conservation.
- Providing irrigation, composting, and tree-pruning classes to our customers, emphasizing water efficiency and conservation.
- Sending out new resident welcome packets with a variety of water efficiency and conservation materials.
- Providing an annual water awareness calendar to our customers.
- Distributing water efficiency and conservation information via bill inserts/newsletters/brochures.
- Staffing the CIMIS hotline.
- Providing discount coupons for our customers from cooperating plant nurseries.
- Supporting paid water efficiency and conservation advertising through RWA membership.
- Providing water efficiency and conservation public service announcements through RWA membership.
- Maintaining and promoting our demonstration Water Efficiency Landscape (WEL)garden and providing tours for individuals and groups.

- Participating in the regional water efficiency and conservation speaker's bureau.
- Participating in coordinated water efficiency and conservation programs with other government agencies, industry, and public interest groups, and the media.
- Providing free customer services, water surveys and irrigation troubleshooting, from our Master Gardener and conservation staff, all certified by the Irrigation Association and Cal Poly's Irrigation Training and Research Center
- Providing comparisons of flat rate to metered rate as well as telephone contact with customers regarding ways to reduce their bill.
- Providing timely and comprehensive water efficiency, conservation, and rebate information as well as drought updates on our website

Implementation Monitoring. The District will annually monitor number of events for each category and report in the annual BMP reports.

District water efficiency and conservation educational materials are located in Appendix K.

Foundational BMP 2. Education
2.2 School Education

(Former BMP 8. School Education Programs)
Program Description-
The District maintains a school education program covering urban and environmental water issues and conditions in the local watershed that includes classroom presentations and instructional assistance. All materials provided meet the State education framework requirements. The District participates with other water agencies in a water awareness poster contest each year and invites students from grades 4-6 to participate. In addition, District staff judge science projects that feature a water conservation or efficiency theme at the Cavitt Junior High science fair. The District offers a Water Bucks program as incentive to involve students and teachers in monitoring school water use to find leaks or ways to reduce water use. District staff make several class presentations each year to teach water efficiency and conservation as well as provide information about our water treatment plant operations.

In addition to the classroom presentations, the District and the RWA support the Newspapers in Education (NIE) program with the Sacramento Bee. Funded by RWA, the NIE provides state framework water efficiency materials to 700 classrooms and more than 24,000 students in the greater Sacramento area including the San Juan Water District students.

Implementation Monitoring. The District annually monitors the number of events for each category and report in the annual BMP reports.

District Educational material samples are located in Appendix K.

Programmatic BMP 3. Residential

(Former BMP 1. Water Survey Programs for Single-Family and Multi-Family Residential Customers)

Program Description-

The District met the initial CUWCC BMP coverage requirements, but will continue to implement water surveys for single-family and multi-family residential customers to include the following:

- Development of water surveys and water efficiency and conservation outreach and marketing strategies and materials that include offering surveys through newsletters to all existing customers at least twice per year and notes on customers' bills.
- Providing inspections of irrigation system and timers.
- Reviewing or developing irrigation schedules.
- Providing customer information packets that include water survey results and efficiency and conservation recommendations.

Complete water survey results are provided and explained to customers and kept on file. Water survey results include watering schedules, recommendations to improve water use efficiency, and customer satisfaction. All residential customers receive a bimonthly newsletter; most issues advertise the residential water audit service.

With funding from USBR, the District developed and implemented programs to increase the number of audits performed. In FY07/08, the District had the high efficiency washing machine rebate program and a reimbursement program for irrigation efficiency improvements, both of which required an audit before a rebate was given.

Implementation Monitoring. The District monitors annual results for meeting coverage goals. The District tracks customer water usage in a customer database and provides usage information on bills.

Enter the number of surveys conducted in past years and the projected number for future years.

Residential Type	*Yr Target*	*2007*	*2008*	*2009***	*2010***	*2011***	*2012***	*2013***
SF accts -	N/A*	286	310	150	152	153	154	155
MF units -		48	9	11	11	11	11	12

*According to the CUWCC Coverage Report found in Appendix J the District has met the coverage requirements for this BMP. These will be implemented as part of the residential Flex Track approach.
**Source: 2006 WCMP.

(Former BMP 2. Residential Plumbing Retrofit)

Program Description-

The District will continue to offer residential plumbing retrofits. Customers are notified of retrofit programs through the District newsletter, notes on bills, bill stuffers, and community events. The District does not maintain an ordinance to enforce retrofits and instead relies on our marketing strategy to inform and provide customers of our available retrofit services.

The District targets homes built prior to 1992. Marketing efforts include announcements in new residential welcome packets, messages on bill statements, and bi-monthly newsletters. Although the

saturation requirement has been met, the District continues to offer kits to customers with high use fixtures.

Implementation Monitoring. The District monitors annual results for meeting coverage goals through the annual BMP reports

Enter the number of showerheads distributed in the past and the projected number for future years

Residential type	*Yr target*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*
SF accts -	N/A*	11	130	100*	100*	100*	100*	100*
MF units -		0	0	0	0	0	0	0

* According to the CUWCC Coverage Report found in Appendix J the District has met the coverage requirements for this BMP. These are not required under the new CUWCC MOU (December 2008). These will be implemented as part of the District's residential Flex Track approach.

(Former BMP 6. High-Efficiency Washing Machine Rebate Programs)

Program Description-

The local power utility, Sacramento Municipal Utilities District (SMUD), offers graduated rebates for electric water heating users up to $125 and the Pacific Gas and Electric Company (PG&E) offers rebates to natural gas water heating customers up to $75 on clothes washers (and other hot water using appliances). Information on this program is provided to District customers through SMUD's marketing activities and their website as they administer the program on behalf of participating water districts. SJWD also supplement's SMUD's efforts in the District newsletters, website, and community events; RWA also markets these rebate programs to customers throughout the region

Implementation Monitoring. The District will monitor performance of this BMP and report annually in the BMP report.

Enter the number of rebates paid in past years & the projected number for future years

$ rebate	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*
$50-$125	57	93	80*	80*	80*	80*	80*

*Projected number of rebates could be higher if the District receives grant funding through the DWR Drought Grant that was awarded in August 2008.

According to the CUWCC MOU, BMP 6 incentives shall be provided to 1.0 percent per year of current single-family accounts. This is equivalent to 98 rebates annually for the District. Financial incentives are provided for the purchase of HECWs that meet an average water factor value of 5.0. According to the January 2007 *Super-Efficient Home Appliances Initiative* report by the Consortium for Energy Efficiency, HECWs with an average water factor value of 5.0 save approximately 8,853 gallons of water per year (gpy) per device. This is equivalent to a total annual water savings goal of 0.87 MG/yr or 2.6 AF/yr for BMP 6 (calculated from 98 rebates per year x 8,853 gpy/rebate). If the District only provides 80 HECW rebates per year, the additional savings that need to be realized as part of the Flex Track Program (to make up for not meeting the original BMP 6 target) is 0.5 AF/yr (98 rebates-80 rebates) x 8,853 gpy/rebate). The District plans to meet its BMP 6 water saving goals through its Flex Track Program via its enhanced residential irrigation efficiency program.

(Former BMP 14. Residential ULFT Replacement Programs))

Program Description-

The rebate program for single-family and multi-family customers is the same. The District advertises the toilet replacement program in our newsletter, welcome packets to new residents, and on our website. The Regional Water Efficiency Program and Sacramento Area Sewer District (formerly the Sacramento Regional County Sanitation District) also does regional promotion of toilet replacement program for SJWD. Customers may receive a rebate of up to $75 per toilet to replace existing 3.5 gallons per flush (gpf) or higher toilets with 1.6 gpf or better and a $125 per toilet rebate to replace high flush toilets with an HET. The Sacramento Area Sewer District advertises and offers an additional $50 rebate to our customers who reside in Sacramento County. The South Placer Wastewater Authority offers an additional $50 for customers using their wastewater services. The District conducts an inspection on all rebate recipients, to provide verification of installation.

Implementation Monitoring: According to the CUWCC Coverage Report found in Appendix J the District has met and exceeded the coverage requirements for this BMP. The District will continue to track the number of toilets replaced in this program in the BMP reports.

Enter the number of toilets replaced in past years and the projected number for future years.

Residential Type	*Yr Target*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*
SF accts -	0*	3,454	200	50**	50**	50**	50**	50**
MF units -		0	0	0*	0*	0*	0*	0*

*According to the CUWCC Coverage Report found in Appendix J the District has met and exceeded the coverage requirements for this BMP.

**The district will continue to offer this program to eligible residents.

According to the CUWCC MOU, BMP 14 compliance entails demonstrating a number of toilet replacements of 3.5 gpf or greater toilets at or above the level achieved through a retrofit on resale ordinance until 2014, or a market saturation of 75% is demonstrated, whichever is sooner.

(Flex Track Program) Irrigation Efficiency Program

Program Description - The District will provide customers up to 50 percent reimbursement of total material costs for qualifying irrigation system upgrades. Eligible irrigation equipment includes equipment that improves irrigation efficiencies as determined by District conservation staff. Efficiencies may include:

- The removal of an old irrigation timer and replacement with an ET controller or one that has a rain sensor, multiple program start times, and/or soil moisture sensor.
- Conversion of spray systems to drip irrigation.
- Retrofit existing non-efficient spray heads with matching precipitation heads.
- Removal of leaking or broken equipment and replacement with new equipment.
- Materials associated with system design improvements that will increase watering efficiencies.
- Other system modifications that enhance irrigation efficiency.

To qualify for reimbursement, customers must agree to a free indoor water audit and/or free landscape irrigation review by a certified San Juan Water District staff member before any improvements are made. Rebates are limited and available on a first-come, first-served basis.

To receive a rebate:
1. A customer will contact the District to schedule an inspection of current irrigation system.
2. Staff will inspect the customer's current system and make recommendations to improve the efficiency of the customer's irrigation system.
3. Customer shall provide a landscape design plan to improve irrigation efficiency and submit to the District.
4. After approval, customer may purchase and install equipment.
5. Customer will call District at 916-791-2663 to schedule a follow-up Landscape Irrigation Review.
6. If the improvements receive the District's approval, customer complete the rebate application, attach the original receipts, and submit the application to the District for processing. Rebates will be issued in the form of a bill credit

Implementation Monitoring: The District will monitor annual results for meeting water savings goals through the annual BMP reports. The District plans to meet its BMP 6 saving goals through its Flex Track Program via our enhanced Irrigation Efficiency program. Based on the calculations in the BMP 6 section of this report, to make up for the original annual savings target not being met through BMP 6, this Flex Track Program will be implemented to save at least approximately 0.5 AF/yr.

Water savings for our irrigation efficiency incentive program will vary by customer. As part of the Flex Track Program documentation required, per the newly revised MOU, the District will document the number of devices/systems installed and estimate the water savings per incentive. For this analysis, it is assumed that per intervention water savings will be 10% of the estimated residential single family outdoor unit water use per the 2006 Water Conservation Master Plan technical analysis. The calculation of per intervention water use for the District is as follows:

Savings Target Estimate Calculation

Item	*Quantity*	*Calculation Notes*
Total water use per single family account	636 gpd	From the WCMP (Brown and Caldwell, 2006)
Percentage of single family water used for outdoor purposes	73%	From the WCMP (Brown and Caldwell, 2006)
Outdoor water use per single family account	464 gpd	=73% x 636 gpd
Water savings estimate for Flex Track residential irrigation efficiency program intervention	15%	Estimated
Savings per single family account per Flex Track residential irrigation efficiency program intervention	70 gpd	=15% x 464 gpd

Annual savings target for Flex Track Program	0.5 AF	(see BMP 6 discussion)
Number of annual interventions required to meet savings target	7 interventions/yr	=0.5 AF per year / 70 gpd (unit conversion not shown)

Enter the number of interventions or savings projected annually.

		Projected interventions				
Program	*Annual Savings, AF*	*2009*	*2010*	*2011*	*2012*	*2013*
BMP 6 – original annual savings target	2.6	98	98	98--	98--	98--
BMP 6 – projected actual annual savings	2.1	80--	80--	80--	80--	80--
Irrigation Efficiency Project	0.5	7	7	7	7	7

Programmatic BMP 4. Commercial, Industrial, Institutional

(Former BMP 9. Conservation Programs for CII Accounts)

Program Description-

The District has identified and ranked CII accounts for water usage between commercial and institutional accounts. The District does not have any industrial accounts. All non-residential accounts are metered and are billed on a volume basis. The District budgeted money for toilet retrofits and large landscape and irrigation efficiency reimbursements. In 2008 one commercial facility utilized the irrigation efficiency program and 2 used the large landscape grant funding to retrofit their irrigation systems. The District determined that schools are the largest water user out of our commercial/institutional customers.

CII Water-Use Survey and Customer Incentives Program. The District offers surveys that include the following:

- Site visit
- Report identifying recommended efficiency measures, paybacks, and agency incentives.

Customer Incentives. In addition to surveys, the District "Water Bucks" program targets schools as the largest commercial/institutional water user. The Water Bucks program instructs students and teachers how to conduct site audits, report findings to the principal, and check for achieved maintenance. The schools are rewarded with rebates in the amount of the school's water bill paid by the school district office. The schools use these funds for physical plant and infrastructure improvements.

Implementation Monitoring. The District will annually monitor type, number, and water use for each CII account type, surveys offered, and survey results and report in the annual BMP reports.

Enter the number of surveys conducted in past years & the projected number for future years

Customer Type	*Yr Target*	*2007*	*2008*	*2009**	*2010**	*2011**	*2012**	*2013**
Comm. accts -	N/A**	54	63	3	3	4	4	5
Indust. accts -		0	0	0	0	0	0	0
Instit. accts -		5	0	0	0	0	0	0

* Source: 2006 WCMP

**According to the CUWCC Coverage Report found in Appendix J the District has met the coverage requirements for this BMP.

Programmatic BMP 5. Landscape

(BMP 5. Large Landscape Conservation Programs and Incentives)

Program Description-

Customer Support, Education, and Assistance. The District will continue to provide customer support, education, and assistance by offering irrigation audits and notifications to large landscape accounts through District newsletters, bills, and community events. Information includes audit availability, controllers, and services available, over-watering evaluations, specific drought watering instructions, drought resistant landscapes, irrigation strategies, and other efficiency methods. Information also includes schedules for irrigation seasons and lists recommended system checks and schedule changes prior to start and just after end of irrigation season. Landscape irrigation training and financial incentives are also offered to customers.

Accounts with Dedicated Irrigation Meters. Accounts with dedicated irrigation meters have not been assigned ETO-based water budgets, but are given ETO-based watering schedules when water surveys are performed. All of the District's accounts with dedicated irrigation meters are billed on a volume basis.

CII Accounts with Mixed-Use. All CII mixed-use accounts are offered the same survey provided under BMP 1. Surveys include the following:

- Irrigation system check.
- Distribution uniformity analysis.
- Review/Develop irrigation schedules.
- Provide customer report/information.
- Tracking survey offers and results.
- Provide irrigation and water efficiency information per BMP 01.

Implementation Monitoring. The District will monitor performance of this BMP and report annually in the BMP report.

Enter the number of landscape budgets/audits in past years & the projected number for future years

Irrigation Type	*Yr Target*	*2007*	*2008*	*2009*	*2010*	*2011*	*2012*	*2013*
Dedicated meters	N/A*	54	63	1	1	1	1	1
Mixed use meters		4	4	1	1	1	1	1

*According to the CUWCC Coverage Report found in Appendix J the District has met the coverage requirements for this BMP.

B. Provide a 3-Year Budget for Expenditures and Staff Effort for BMPs

1. Amount actually spent during current year - 2008

Retail:

BMP	BMP Name	Estimated Expenditures	Staff $$$
1	Residential Water Audits	$ 10,600	$ 39,073.00
2	Residential Retrofit	$ 500	$ 135.00
3	System Water Audit and Leak Detection	$ 40,474	$ 40,347.00
4	Metering w/ Commodity Rates	$ 45,905	$ 66,135.00
5	Large Landscape Conservation Programs	$ 50,000	$ 5,933.00
6	Washing Machine Rebates	$ 7,875	$ 2,653.00
7	Public Information	$ 8,700	$ 6,750.00
8	School Education	$ 44,775	$ 3,567.00
9	CII Conservation Programs	$ 15,100	$ -
10	Wholesale Agency Programs	$ -	$ -
11	Conservation Pricing	$ 10,043	$ 5,550.00
12	Conservation Coordinator	$ 1,390	$347,715.00
13	Water Waste Prohibition	$ -	$267,842.00
14	ULFT Program	$ 21,750	$ 7,900.00
Total		$ 257,112	$793,600.00

Wholesale:

BMP	BMP Name	Estimated Expenditures	Staff $$$
3	System Water Audit and Leak Detection	$ -	$ -
7	Public Information	$ 4,750	$ 1,000
8	School Education	$ 500	$ 2,000
10	Wholesale Agency Programs	$ 65,673	$ 4,024
12	Conservation Coordinator	$ 2,110	$ 111,627
Total		$ 73,033	$ 118,651

2. Projected budget summary for 2nd year - 2009

Retail:

BMP	BMP Name	Estimated Expenditures	Staff $$$
1	Utilities Operations		
1.1	Operations Practices*	$ 1,432	$ 660,000
1.2	Pricing	$ 10,345	$ 6,000
1.3	Metering	$ 42,285	$ 70,000
1.4	Water Loss Control	$ 45,000	$ 45,000
2	Education		
2.1	Public Information Programs	$ 8,765	$ 6,850
2.2	School Education	$ 46,120	$ 3,600
3	Residential	$ 41,947	$ 50,000
4	CII	$ 51,500	$ 6,500
5	Landscape	$ 15,553	$ 3,000
Total		$ 262,947	$ 850,950

*Operations practices included conservation coordinator and water waste prohibition efforts.

Wholesale:

BMP	BMP Name	Estimated Expenditures	Staff $$$
1	Utilities Operations		
1.1	Operations Practices*	$ 67,783	$ 115,651
1.4	Water Loss Control	$ 0	$ 0
2	Education		
2.1	Public Information Programs	$ 4,750	$ 1,000
2.2	School Education	$ 500	$ 2,000
Total		$ 73,033	$ 118,651

*Operations practices included conservation coordinator and wholesale agency programs.

3. Projected budget summary for 3rd year. - 2010

Retail:

BMP	BMP Name	Estimated Expenditures	Staff $$$
1	Utilities Operations		
1.1	Operations Practices*	$ 1,500	$ 675,000
1.2	Pricing	$ 20,000	$ 15,000
1.3	Metering	$ 43,500	$ 71,000
1.4	Water Loss Control	$ 46,350	$ 46,000
2	Education		
2.1	Public Information Programs	$ 9,030	$ 6,900
2.2	School Education	$ 47,500	$ 3,700
3	Residential	$ 42,075	$ 51,500
4	CII	$ 53,045	$ 7,000
5	Landscape	$ 16,020	$ 3,200
Total		$ 279,020	$ 879,300

*Operations practices included conservation coordinator and water waste prohibition efforts.

Wholesale:

BMP	BMP Name	Estimated Expenditures	Staff $$$
1	Utilities Operations		
1.1	Operations Practices*	$ 72,500	$ 131,000
1.4	Water Loss Control	$ 0	$ 0
2	Education		
2.1	Public Information Programs	$ 5,100	$ 1,600
2.2	School Education	$ 600	$ 2,600
Total		$ 78,200	$ 135,200

*Operations practices included conservation coordinator and wholesale agency programs.

4. Projected budget summary for 4th year. - 2011

Retail:

BMP	BMP Name	Estimated Expenditures	Staff $$$
1	Utilities Operations		
1.1	Operations Practices*	$ 1,600	$ 685,000
1.2	Pricing	$ 21,000	$ 16,000
1.3	Metering	$ 44,000	$ 72,000
1.4	Water Loss Control	$ 47,000	$ 47,000
2	Education		
2.1	Public Information Programs	$ 9,300	$ 7,000
2.2	School Education	$ 78,925	$ 4,000
3	Residential	$ 43,335	$ 53,000
4	CII	$ 54,635	$ 8,000
5	Landscape	$ 16,500	$ 3,300
Total		$ 316,295	$ 895,300

*Operations practices included conservation coordinator and water waste prohibition efforts.

Wholesale:

BMP	BMP Name	Estimated Expenditures	Staff $$$
1	Utilities Operations		
1.1	Operations Practices*	$ 74,700	$ 138,500
1.4	Water Loss Control	$ 5,000	$ 5,000
2	Education		
2.1	Public Information Programs	$ 5,200	$ 1,700
2.2	School Education	$ 700	$ 2,700
Total		$ 85,600	$ 147,900

*Operations practices included conservation coordinator and wholesale agency programs.

Section 5: Plan Implementation

Pursuant to water service and settlement contract terms, contractors must report on Plan implementation annually.

Agricultural contractors can complete an annual update by filling in the information for BMPs on the WaterShare website at www.usbr.gov/mp/watershare/.

Urban contractors can complete an annual update by filling in the information for urban BMPs on the CUWCC website. Contractors who are signatories of the CUWCC are currently submitting annual reports via the CUWCC's *BMP Reporting Database* located on their web site at www.cuwcc.org. Through an agreement with the CUWCC, Reclamation's urban non-signatories may now submit their Annual Reports through the CUWCC's website using "guest accounts." Urban BMPs are reviewed based on the CUWCC's MOU (amended March 14, 2001).

Section 6: Exemption Process

The District is not claiming any BMP exemptions.

Section 7: Regional Criteria

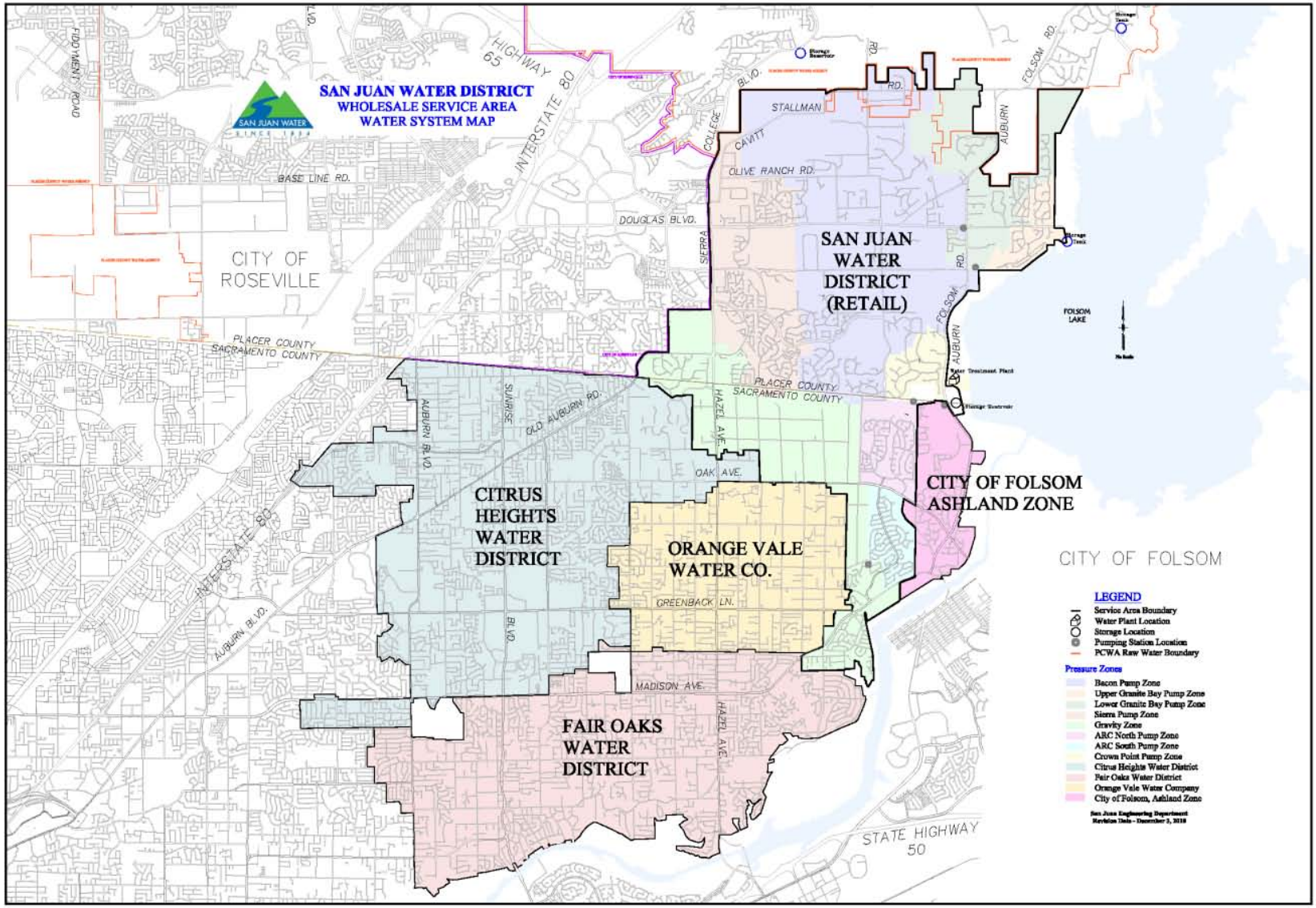
There are no Regional Criteria at this time. If regional criteria are considered in the future, they will be developed as a separate document.

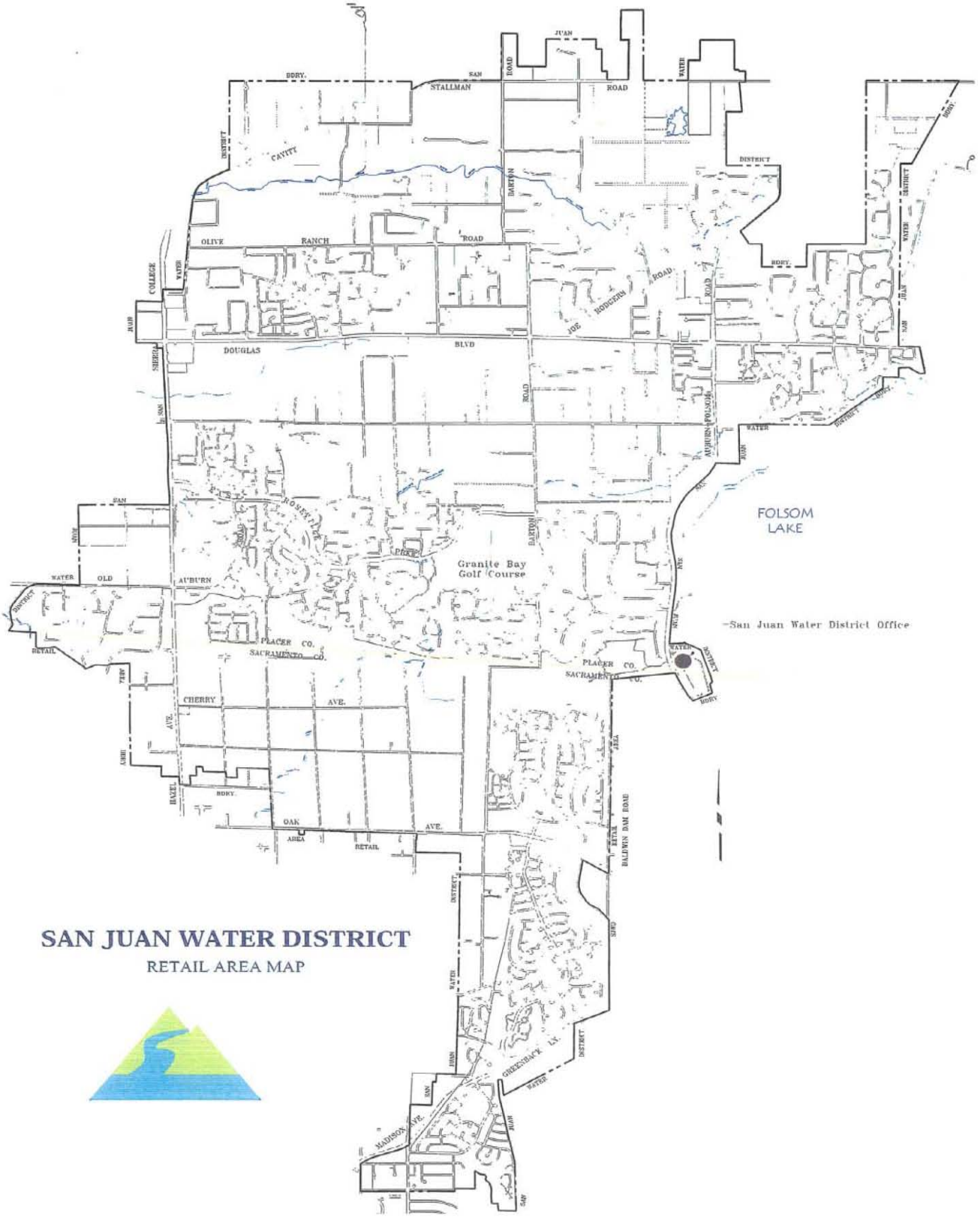
Section 8: Five-Year Plan Revision Procedure

No data required.

APPENDIX A

Location of Facilities


SAN JUAN WATER DISTRICT
WHOLESALE SERVICE AREA
WATER SYSTEM MAP
SAN JUAN WATER
SINCE 1954
CITY OF ROSEVILLE
SAN JUAN WATER DISTRICT (RETAIL)
CITRUS HEIGHTS WATER DISTRICT
ORANGE VALE WATER CO.
FAIR OAKS WATER DISTRICT
CITY OF FOLSOM ASHLAND ZONE
CITY OF FOLSOM
FOLSOM LAKE
HIGHWAY 65
INTERSTATE 80
STATE HIGHWAY 50
BASE LINE RD.
DOUGLAS BLVD.
OLIVE RANCH RD.
STALLMAN
CAVITT
COLLEGE BLVD.
FOLSOM RD.
AUBURN BLVD.
OLD AUBURN RD.
SUNRISE
HAZEL AVE.
OAK AVE.
GREENBACK LN.
MADISON AVE.
PLACER COUNTY
SACRAMENTO COUNTY
LEGEND
Service Area Boundary
Water Plant Location
Storage Location
Pumping Station Location
PCWA Raw Water Boundary
Pressure Zones
Bacon Pump Zone
Upper Granite Bay Pump Zone
Lower Granite Bay Pump Zone
Sierra Pump Zone
Gravity Zone
ARC North Pump Zone
ARC South Pump Zone
Crown Point Pump Zone
Citrus Heights Water District
Fair Oaks Water District
Orange Vale Water Company
City of Folsom, Ashland Zone
San Juan Engineering Department
Revision Date - December 3, 2018



SAN JUAN WATER DISTRICT

RETAIL AREA MAP

APPENDIX B

Code of Ordinances Table of Contents

SAN JUAN WATER DISTRICT
CODE OF ORDINANCES

Table of Contents

Attachments:

APPENDIX C

Rate Structure

The District's rate schedule complies with the CUWCC MOU BMP 11 Retail Conservation Pricing Option 2. Based on Option 2, the District uses the rate design model included in the Municipal Water and Wastewater Rate Manual published by the Canadian Water and Wastewater Association. The District uses their water system and cost information to calculate the uniform volume rate based on their long-run incremental cost of service, and the associated meter charge.

San Juan Water District's Conservation Subcommittee is researching various rate structure possibilities and is working toward changing the current rate structure and implementing a conserving inclining rate structure. The Conservation Subcommittee's goal is to research the inclining rate structure, have several informational meetings with our ratepayers, and work toward implementing such a rate structure by the next five-year plan. Since the implementation of meters, we have been meeting with our customers regarding the benefits and need to implement such a rate structure.

SAN JUAN WATER DISTRICT
WATER RATES AND CHARGES FOR JANUARY 1, 2008

RESIDENTIAL METERED RATES (BILLED BASED ON # OF DAYS IN READ PERIOD)

		Up to 1"	1½"	2"
- Daily Base Charge (Fixed)		$0.97	$2.58	$4.12
Plus Consumption				
- Baseline Rate/unit	0 to 20 ccf	$0.37	$0.37	$0.37
- Standardized Residential Rate/unit	21 to 200 ccf	$0.62	$0.62	$0.62
- Landscape Efficiency Rate/unit	201+ ccf	$0.44	$0.44	$0.44

COMMERCIAL METERED RATES (BILLED BASED ON READ PERIOD)

	Up to 1"	1 ½"	2"	3"	4"
- Daily Base Charge (Fixed)	$0.97	$2.58	$4.12	$8.19	$12.77
- Plus Consumption / unit	$0.53	$0.53	$0.53	$0.53	$ 0.53

COMMERCIAL METERED RATES (BILLED BASED ON READ PERIOD)

	6"	8"	10"	12"	Fire District
- Daily Base Charge (Fixed)	$25.51	$45.88	$73.89	$109.55	$4.96
- Plus Consumption / unit	$ 0.53	$0.53	$ 0.53	$ 0.53	$0.53

COMMERCIAL / OTHER (BILLED BASED ON # OF DAYS IN READ PERIOD)

PRIVATE FIRE LINE RATES:	4-inch	6-inch	8-inch	10-inch
- Daily Base Charge (Fixed)	$0.37	$0.55	$0.73	$0.89

1 unit = 100 cubic feet = 748 gallons

APPENDIX D

Sample Bills

SAMPLE – RESIDENTIAL BILL (TIER 1 CONSUMPTION)

SAN JUAN WATER DISTRICT
P.O. Box 2670
Granite Bay CA 95746-2670

RETURN SERVICE REQUESTED

9935 Auburn Folsom Road ▲ Granite Bay, California 95746
(916) 791-0115 ▲ www.sjwd.org
Monday thru Friday ▲ 8:30 AM to 5:00 PM

AUTOSCH 5-DIGIT 95630 6 PS5 49581Rb27-A-1
1410 1 AV 0.324

ACCOUNT INFORMATION

NAME:

SERVICE ADDRESS:

ACCOUNT NUMBER:

BILL DATE: 12/03/2008

DUE DATE: 12/24/2008

SERVICE PERIOD: 9/17/2008 to 11/18/2008

ACCOUNT ACTIVITY

PREVIOUS READING	PREVIOUS READ DATE	CURRENT READING	CURRENT READ DATE	DAYS	UNITS USED
590	09/17/2008	600	11/18/2008	62	10

See back of statement for Usage History

AMOUNT DUE

Base Charge for service period	60.14
Tier 1 Consumption	3.70
TOTAL:	**$63.84**

RATES AS OF 01/01/08

Base Charge		= $0.97 per day
Tier 1	0 - 20	= $0.37 per unit
Tier 2	21 - 200	= $0.62 per unit
Tier 3	201+	= $0.44 per unit

1 unit = 100 cubic feet = 748 gallons

IMPORTANT MESSAGE - PLEASE READ

The District's former entrance is closed due to road construction and will remain closed after the road widening is completed. Our new south entrance has a stoplight for your safety in entering and exiting our facility.
HAPPY HOLIDAYS FROM SAN JUAN WATER DISTRICT!

RETURN THIS PORTION WITH YOUR PAYMENT

9935 Auburn Folsom Road ▲ Granite Bay, California 95746
(916) 791-0115 ▲ www.sjwd.org
Monday thru Friday ▲ 8:30 AM to 5:00 PM

ACCOUNT NUMBER:

SERVICE ADDRESS:

BILL TO:

AMOUNT DUE: 63.84

DUE DATE: 12/24/2008

ENTER AMOUNT PAID: $

Please Write Your Account Number On Your Check

SAN JUAN WATER DISTRICT
PO BOX 2670
GRANITE BAY CA 95746-2670

B

VISA MasterCard

Please see reverse to pay by Visa or MasterCard.

00096009004008800000638400000000020081224 3

SAN JUAN WATER DISTRICT

OFFICE LOCATION:	9935 AUBURN FOLSOM RD., GRANITE BAY, CA 95746
MAILING ADDRESS:	P.O. BOX 2670, GRANITE BAY, CA 95746-2670
OFFICE HOURS:	8:30 AM TO 5:00 PM MONDAY THRU FRIDAY
	CLOSED WEEKENDS AND HOLIDAYS (DROP BOX AVAILABLE FOR PAYMENTS AT MAIN GATE)
TELEPHONE:	BILLING INFORMATION (916) 791-0115 EMERGENCY SERVICE / REPAIR* (916) 791-0115 *AVAILABLE 24 HOURS A DAY

IMPORTANT, PLEASE READ...

WATER BILLING RULES AND REGULATIONS

Payment may be made by phone with a check or credit card; online on our website www.sjwd.org by check or credit card; by mail, or in person. If paying in person, please bring the entire statement.

This bill covers a two(2) month period, is due upon receipt and becomes delinquent twenty-one (21) days from billing date. If not paid within that time, your account may be subject to a $15 late fee and the District may initiate procedures to discontinue service until all charges are paid in full. You may initiate a complaint, request an investigation concerning services, or request a payment plan for unpaid charges by presenting your complaint to the General Manager, or his designate, by mail or in person at the district office, or by phone.

Usage History	Days	Total Units	Units/Day
Current Billing Period	62	10	0.16
Last Billing Period	62	15	0.24
Last Year Same Period	61	9	0.15

1 unit = 100 cubic feet = 748 gallons

Please make corrections and/or comments regarding your account:

NAME _____

ADDRESS _____

CITY / STATE _____ ZIP CODE _____

COMMENTS _____

FOR SINGLE CREDIT CARD OR ATM PAYMENTS:
(All information must be completed below to process this transaction) ☐ VISA ☐

Card Account Number _____ Cardholder Name (please print) _____

Card Expiration Date _____ $ Amount Enclosed _____ Cardholder Signature _____

Card Billing Address (including zip code) if different from service address _____ Daytime Phone# _____

SAMPLE – RESIDENTIAL BILL (TIER 2 CONSUMPTION)

SAN JUAN WATER DISTRICT
P.O. Box 2670
Granite Bay CA 95746-2670

RETURN SERVICE REQUESTED

9935 Auburn Folsom Road ▲ Granite Bay, California 95746
(916) 791-0115 ▲ www.sjwd.org
Monday thru Friday ▲ 8:30 AM to 5:00 PM

AUTO5-DIGIT 95746 3 PS5 47721RA02-A-1
651 1 AV 0.324

ACCOUNT INFORMATION

NAME:

SERVICE ADDRESS:

ACCOUNT NUMBER:

BILL DATE: 09/03/2008

DUE DATE: 09/24/2008

SERVICE PERIOD: 6/2/2008 to 8/4/2008

ACCOUNT ACTIVITY

PREVIOUS READING	PREVIOUS READ DATE	CURRENT READING	CURRENT READ DATE	DAYS	UNITS USED
3 428	06/02/2008	3 564	08/04/2008	63	136

See back of statement for Usage History

AMOUNT DUE

RATES AS OF 01/01/08		
Base Charge		= $0.97 per day
Tier 1	0 - 20	= $0.37 per unit
Tier 2	21 - 200	= $0.62 per unit
Tier 3	201+	= $0.44 per unit

1 unit = 100 cubic feet = 748 gallons

Base Charge for service period	61.11
Tier 1 Consumption	7.40
Tier 2 Consumption	71.92
TOTAL:	**$140.43**

IMPORTANT MESSAGE - PLEASE READ

Due to drought conditions and water supply cutbacks, we are asking customers to voluntarily reduce their water use. Water supply conditions could be worse next year if the dry weather continues. Contact us at 791-2663 or visit our website at www.sjwd.org to learn about the drought concerns and ways you can increase your water efficiency.

RETURN THIS PORTION WITH YOUR PAYMENT

9935 Auburn Folsom Road ▲ Granite Bay, California 95746
(916) 791-0115 ▲ www.sjwd.org
Monday thru Friday ▲ 8:30 AM to 5:00 PM

ACCOUNT NUMBER:

SERVICE ADDRESS:

BILL TO:

AMOUNT DUE: 140.43

DUE DATE: 09/24/2008

ENTER AMOUNT PAID: $

Please Write Your Account Number On Your Check

SAN JUAN WATER DISTRICT
PO BOX 2670
GRANITE BAY CA 95746-2670

A

Please see reverse to pay by Visa or MasterCard.

00192373781001200001404300000000002008092 45

SAN JUAN WATER DISTRICT

OFFICE LOCATION:	9935 AUBURN FOLSOM RD., GRANITE BAY, CA 95746	
MAILING ADDRESS:	P.O. BOX 2670, GRANITE BAY, CA 95746-2670	
OFFICE HOURS:	8:30 AM TO 5:00 PM MONDAY THRU FRIDAY	
	CLOSED WEEKENDS AND HOLIDAYS (DROP BOX AVAILABLE FOR PAYMENTS AT MAIN GATE)	
TELEPHONE:	BILLING INFORMATION	(916) 791-0115
	EMERGENCY SERVICE / REPAIR*	(916) 791-0115
	*AVAILABLE 24 HOURS A DAY	

IMPORTANT, PLEASE READ...

WATER BILLING RULES AND REGULATIONS

Payment may be made by phone with a check or credit card; online on our website www.sjwd.org by check or credit card; by mail, or in person. If paying in person, please bring the entire statement.

This bill covers a two(2) month period, is due upon receipt and becomes delinquent twenty-one (21) days from billing date. If not paid within that time, your account may be subject to a $15 late fee and the District may initiate procedures to discontinue service until all charges are paid in full. You may initiate a complaint, request an investigation concerning services, or request a payment plan for unpaid charges by presenting your complaint to the General Manager, or his designate, by mail or in person at the district office, or by phone.

Usage History	Days	Total Units	Units/Day
Current Billing Period	63	136	2.16
Last Billing Period	61	245	4.02
Last Year Same Period	52	281	5.40

1 unit = 100 cubic feet = 748 gallons

Please make corrections and/or comments regarding your account:

NAME _____

ADDRESS _____

CITY / STATE _____ ZIP CODE _____

COMMENTS _____

FOR SINGLE CREDIT CARD OR ATM PAYMENTS:
(All information must be completed below to process this transaction) ☐ VISA ☐

Card Account Number _____ Cardholder Name (please print) _____

Card Expiration Date _____ $ _____ Amount Enclosed _____ Cardholder Signature _____

Card Billing Address (including zip code) if different from service address _____ Daytime Phone# _____

SAN JUAN WATER DISTRICT

OFFICE LOCATION:	9935 AUBURN FOLSOM RD., GRANITE BAY, CA 95746	
MAILING ADDRESS:	P.O. BOX 2670, GRANITE BAY, CA 95746-2670	
OFFICE HOURS:	8:30 AM TO 5:00 PM MONDAY THRU FRIDAY	
	CLOSED WEEKENDS AND HOLIDAYS (DROP BOX AVAILABLE FOR PAYMENTS AT MAIN GATE)	
TELEPHONE:	BILLING INFORMATION	(916) 791-0115
	EMERGENCY SERVICE / REPAIR*	(916) 791-0115
	*AVAILABLE 24 HOURS A DAY	

IMPORTANT, PLEASE READ...

WATER BILLING RULES AND REGULATIONS

Payment may be made by phone with a check or credit card; online on our website www.sjwd.org by check or credit card; by mail, or in person. If paying in person, please bring the entire statement.

This bill covers a two(2) month period, is due upon receipt and becomes delinquent twenty-one (21) days from billing date. If not paid within that time, your account may be subject to a $15 late fee and the District may initiate procedures to discontinue service until all charges are paid in full. You may initiate a complaint, request an investigation concerning services, or request a payment plan for unpaid charges by presenting your complaint to the General Manager, or his designate, by mail or in person at the district office, or by phone.

Usage History	Days	Total Units	Units/Day
Current Billing Period	63	136	2.16
Last Billing Period	61	245	4.02
Last Year Same Period	52	281	5.40

1 unit = 100 cubic feet = 748 gallons

Please make corrections and/or comments regarding your account:

NAME _____

ADDRESS _____

CITY / STATE _____ ZIP CODE _____

COMMENTS _____

FOR SINGLE CREDIT CARD OR ATM PAYMENTS:
(All information must be completed below to process this transaction) ☐ VISA ☐

Card Account Number _____ Cardholder Name (please print) _____

Card Expiration Date _____ $ _____ Amount Enclosed _____ Cardholder Signature _____

Card Billing Address (including zip code) if different from service address _____ Daytime Phone# _____

SAMPLE – RESIDENTIAL BILL (TIER 3 CONSUMPTION)

SAN JUAN WATER DISTRICT
P.O. Box 2670
Granite Bay CA 95746-2670

RETURN SERVICE REQUESTED

9935 Auburn Folsom Road ▲ Granite Bay, California 95746
(916) 791-0115 ▲ www.sjwd.org
Monday thru Friday ▲ 8:30 AM to 5:00 PM

AUTO5-DIGIT 95746 13 PS5 47719RA04-A-1
3189 1 AV 0.324

GRANITE BAY CA 95746-6704

ACCOUNT INFORMATION

NAME:

SERVICE ADDRESS:

ACCOUNT NUMBER:

BILL DATE: 08/06/2008

DUE DATE: 08/27/2008

SERVICE PERIOD: 5/1/2008 to 7/1/2008

ACCOUNT ACTIVITY

PREVIOUS READING	PREVIOUS READ DATE	CURRENT READING	CURRENT READ DATE	DAYS	UNITS USED
8 917	05/01/2008	9 190	07/01/2008	61	273

See back of statement for Usage History

AMOUNT DUE

RATES AS OF 01/01/08		
Base Charge		= $0.97 per day
Tier 1	0 - 20	= $0.37 per unit
Tier 2	21 - 200	= $0.62 per unit
Tier 3	201+	= $0.44 per unit

1 unit = 100 cubic feet = 748 gallons

Base Charge for service period	59.17
Tier 1 Consumption	7.40
Tier 2 Consumption	111.60
Tier 3 Consumption	32.12
TOTAL:	**$210.29**

IMPORTANT MESSAGE - PLEASE READ

• The Board of Directors approved a 9% increase in retail rates to take effect on January 1. The increase will cover the rising cost of water supply and capital improvement projects. The Board is working towards paying for capital projects with a pay-as-you-go strategy. • Did you know we have staff available to help you with irrigation problems? We can make recommendations to improve your system's performance and save you money! Call 791-2663 to schedule an appointment.

RETURN THIS PORTION WITH YOUR PAYMENT

9935 Auburn Folsom Road ▲ Granite Bay, California 95746
(916) 791-0115 ▲ www.sjwd.org
Monday thru Friday ▲ 8:30 AM to 5:00 PM

ACCOUNT NUMBER:

SERVICE ADDRESS:

BILL TO:

AMOUNT DUE: 210.29

DUE DATE: 08/27/2008

ENTER AMOUNT PAID: $

Please Write Your Account Number On Your Check

SAN JUAN WATER DISTRICT
PO BOX 2670
GRANITE BAY CA 95746-2670

B

VISA MasterCard

Please see reverse to pay by Visa or MasterCard.

0009198900100160000210290000000000200808274

SAN JUAN WATER DISTRICT

OFFICE LOCATION:	9935 AUBURN FOLSOM RD., GRANITE BAY, CA 95746
MAILING ADDRESS:	P.O. BOX 2670, GRANITE BAY, CA 95746-2670
OFFICE HOURS:	8:30 AM TO 5:00 PM MONDAY THRU FRIDAY
	CLOSED WEEKENDS AND HOLIDAYS
	(DROP BOX AVAILABLE FOR PAYMENTS AT MAIN GATE)
TELEPHONE:	BILLING INFORMATION (916) 791-0115
	EMERGENCY SERVICE / REPAIR* (916) 791-0115
	*AVAILABLE 24 HOURS A DAY

IMPORTANT, PLEASE READ...

WATER BILLING RULES AND REGULATIONS

Payment may be made by phone with a check or credit card; online on our website www.sjwd.org by check or credit card; by mail, or in person. If paying in person, please bring the entire statement.

This bill covers a two(2) month period, is due upon receipt and becomes delinquent twenty-one (21) days from billing date. If not paid within that time, your account may be subject to a $15 late fee and the District may initiate procedures to discontinue service until all charges are paid in full. You may initiate a complaint, request an investigation concerning services, or request a payment plan for unpaid charges by presenting your complaint to the General Manager, or his designate, by mail or in person at the district office, or by phone.

Usage History	Days	Total Units	Units/Day
Current Billing Period	61	273	4.48
Last Billing Period	59	142	2.41
Last Year Same Period	61	277	4.54

1 unit = 100 cubic feet = 748 gallons

Please make corrections and/or comments regarding your account:

NAME _____

ADDRESS _____

CITY / STATE _____ ZIP CODE _____

COMMENTS _____

FOR SINGLE CREDIT CARD OR ATM PAYMENTS:
(All information must be completed below to process this transaction) ☐ VISA ☐

Card Account Number _____ Cardholder Name (please print) _____

Card Expiration Date _____ $ Amount Enclosed _____ Cardholder Signature _____

Card Billing Address (including zip code) if different from service address _____ Daytime Phone# _____

SAMPLE – NON-RESIDENTIAL BILL (LOW CONSUMPTION)

SAN JUAN WATER DISTRICT
P.O. Box 2670
Granite Bay CA 95746-2670

RETURN SERVICE REQUESTED

9935 Auburn Folsom Road ▲ Granite Bay, California 95746
(916) 791-0115 ▲ www.sjwd.org
Monday thru Friday ▲ 8:30 AM to 5:00 PM

**SINGLE-PIECE 1 SGL 49581RA27-A-1
126 1 SP 0.420

ACCOUNT INFORMATION

NAME:

SERVICE ADDRESS:

ACCOUNT NUMBER:

BILL DATE: 12/03/2008

DUE DATE: 12/24/2008

SERVICE PERIOD: 9/22/2008 to 11/20/2008

ACCOUNT ACTIVITY

PREVIOUS READING	PREVIOUS READ DATE	CURRENT READING	CURRENT READ DATE	DAYS	UNITS USED
1 379	09/22/2008	1 385	11/20/2008	59	6

See back of statement for Usage History

AMOUNT DUE

Tier 1 Consumption	3.18
Base Charge for service period	243.08
TOTAL:	**$246.26**

IMPORTANT MESSAGE - PLEASE READ

The District's former entrance is closed due to road construction and will remain closed after the road widening is completed. Our new south entrance has a stoplight for your safety in entering and exiting our facility. HAPPY HOLIDAYS FROM SAN JUAN WATER DISTRICT!

RETURN THIS PORTION WITH YOUR PAYMENT

9935 Auburn Folsom Road ▲ Granite Bay, California 95746
(916) 791-0115 ▲ www.sjwd.org
Monday thru Friday ▲ 8:30 AM to 5:00 PM

ACCOUNT NUMBER:

SERVICE ADDRESS:

BILL TO:

AMOUNT DUE: 246.26

DUE DATE: 12/24/2008

ENTER AMOUNT PAID: $

Please Write Your Account Number On Your Check

VISA MasterCard

Please see reverse to pay by Visa or MasterCard.

SAN JUAN WATER DISTRICT
PO BOX 2670
GRANITE BAY CA 95746-2670

B

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SAN JUAN WATER DISTRICT

OFFICE LOCATION:	9935 AUBURN FOLSOM RD., GRANITE BAY, CA 95746
MAILING ADDRESS:	P.O. BOX 2670, GRANITE BAY, CA 95746-2670
OFFICE HOURS:	8:30 AM TO 5:00 PM MONDAY THRU FRIDAY
	CLOSED WEEKENDS AND HOLIDAYS
	(DROP BOX AVAILABLE FOR PAYMENTS AT MAIN GATE)
TELEPHONE:	BILLING INFORMATION (916) 791-0115
	EMERGENCY SERVICE / REPAIR* (916) 791-0115
	*AVAILABLE 24 HOURS A DAY

IMPORTANT, PLEASE READ...

WATER BILLING RULES AND REGULATIONS

Payment may be made by phone with a check or credit card; online on our website www.sjwd.org by check or credit card; by mail, or in person. If paying in person, please bring the entire statement.

This bill covers a two(2) month period, is due upon receipt and becomes delinquent twenty-one (21) days from billing date. If not paid within that time, your account may be subject to a $15 late fee and the District may initiate procedures to discontinue service until all charges are paid in full. You may initiate a complaint, request an investigation concerning services, or request a payment plan for unpaid charges by presenting your complaint to the General Manager, or his designate, by mail or in person at the district office, or by phone.

Usage History	Days	Total Units	Units/Day
Current Billing Period	59	6	0.10
Last Billing Period	62	6	0.10
Last Year Same Period	60	8	0.13

1 unit = 100 cubic feet = 748 gallons

Please make corrections and/or comments regarding your account:

NAME _____

ADDRESS _____

CITY / STATE _____ ZIP CODE _____

COMMENTS _____

_____

FOR SINGLE CREDIT CARD OR ATM PAYMENTS:
(All information must be completed below to process this transaction) ☐ VISA ☐

_____ _____
Card Account Number Cardholder Name (please print)

_____ $_____ _____
Card Expiration Date Amount Enclosed Cardholder Signature

_____ _____
Card Billing Address (including zip code) if different from service address Daytime Phone#

SAMPLE – NON-RESIDENTIAL BILL (HIGH CONSUMPTION)

SAN JUAN WATER DISTRICT
P.O. Box 2670
Granite Bay CA 95746-2670

RETURN SERVICE REQUESTED

9935 Auburn Folsom Road ▲ Granite Bay, California 95746
(916) 791-0115 ▲ www.sjwd.org
Monday thru Friday ▲ 8:30 AM to 5:00 PM

**SINGLE-PIECE 1 SGL 47311RB30-A-1
97 1 SP 0.420

ACCOUNT INFORMATION

NAME:

SERVICE ADDRESS:

ACCOUNT NUMBER:

BILL DATE: 07/02/2008

DUE DATE: 07/23/2008

SERVICE PERIOD: 4/21/2008 to 6/20/2008

ACCOUNT ACTIVITY

PREVIOUS READING	PREVIOUS READ DATE	CURRENT READING	CURRENT READ DATE	DAYS	UNITS USED
329 880	04/21/2008	338 415	06/20/2008	60	8,535

See back of statement for Usage History

AMOUNT DUE

Base Charge for service period	766.20
Tier 1 Consumption	4,523.55
TOTAL:	**$5,289.75**

IMPORTANT MESSAGE - PLEASE READ

• The Board of Directors approved a 9% increase in retail rates to take effect on January 1. The increase will cover the rising cost of water supply and capital improvement projects. The Board is working towards paying for capital projects with a pay-as-you-go strategy. • Did you know we have staff available to help you with irrigation problems? We can make recommendations to improve your system's performance and save you money! Call 791-2663 to schedule an appointment.

RETURN THIS PORTION WITH YOUR PAYMENT

9935 Auburn Folsom Road ▲ Granite Bay, California 95746
(916) 791-0115 ▲ www.sjwd.org
Monday thru Friday ▲ 8:30 AM to 5:00 PM

AMOUNT DUE: 5,289.75

DUE DATE: 07/23/2008

ENTER AMOUNT PAID: $

ACCOUNT NUMBER:

SERVICE ADDRESS:

BILL TO:

Please Write Your Account Number On Your Check

VISA MasterCard

Please see reverse to pay by Visa or MasterCard.

SAN JUAN WATER DISTRICT
PO BOX 2670
GRANITE BAY CA 95746-2670

A

00122339509000500052897500000000020080723O

SAN JUAN WATER DISTRICT

OFFICE LOCATION:	9935 AUBURN FOLSOM RD., GRANITE BAY, CA 95746
MAILING ADDRESS:	P.O. BOX 2670, GRANITE BAY, CA 95746-2670
OFFICE HOURS:	8:30 AM TO 5:00 PM MONDAY THRU FRIDAY
	CLOSED WEEKENDS AND HOLIDAYS
	(DROP BOX AVAILABLE FOR PAYMENTS AT MAIN GATE)
TELEPHONE:	BILLING INFORMATION (916) 791-0115
	EMERGENCY SERVICE / REPAIR* (916) 791-0115
	*AVAILABLE 24 HOURS A DAY

IMPORTANT, PLEASE READ...

WATER BILLING RULES AND REGULATIONS

Payment may be made by phone with a check or credit card; online on our website www.sjwd.org by check or credit card; by mail, or in person. If paying in person, please bring the entire statement.

This bill covers a two(2) month period, is due upon receipt and becomes delinquent twenty-one (21) days from billing date. If not paid within that time, your account may be subject to a $15 late fee and the District may initiate procedures to discontinue service until all charges are paid in full. You may initiate a complaint, request an investigation concerning services, or request a payment plan for unpaid charges by presenting your complaint to the General Manager, or his designate, by mail or in person at the district office, or by phone.

Usage History	Days	Total Units	Units/Day
Current Billing Period	60	8,535	142.25
Last Billing Period	59	3720	63.05
Last Year Same Period	59	7855	133.14

1 unit = 100 cubic feet = 748 gallons

Please make corrections and/or comments regarding your account:

NAME _____

ADDRESS _____

CITY / STATE _____ ZIP CODE _____

COMMENTS _____

FOR SINGLE CREDIT CARD OR ATM PAYMENTS:
(All information must be completed below to process this transaction) ☐ VISA ☐

Card Account Number _____ Cardholder Name (please print) _____

Card Expiration Date _____ $ Amount Enclosed _____ Cardholder Signature _____

Card Billing Address (including zip code) if different from service address _____ Daytime Phone# _____

APPENDIX E

Water Shortage Plan

APPENDIX E

MANDATORY REQUIREMENTS – STAGES 1 – 5

WATER CONSERVATION STAGE DECLARATION

Upon declaration or amendment by the Board of Directors of a specific Stage in effect as defined in Section I, the following mandatory water conservation requirements shall be in effect.

The declaration of Short-Term Stage 4 or Stage 5 water conservation requirements may be declared by the agency's General Manager or his/her designee and subject to ratification by the agency's Board of Directors in a regular or special session. A short-term declaration is for water shortage conditions expected for a duration of 45 days or less.

STAGE 1 – NORMAL WATER SUPPLY

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.

2. Water shall be confined to the customer's property and shall not be allowed to run-off to adjoining properties or to the roadside ditch or gutter. Care shall be taken not to water past the point of saturation.

3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.

4. Leaking customer pipes or faulty sprinklers shall be repaired within five (5) working days or less if warranted by the severity of the problem.

5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. Pool draining and refilling shall be allowed only for health, maintenance, or structural considerations.

6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health, esthetic or sanitary purposes, is prohibited.

7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.

STAGE 2 – WATER ALERT

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.

2. Water shall be confined to the customer's property and shall not be allowed to run-off to adjoining properties or to the roadside ditch or gutter. Care shall be taken not to water past the point of saturation.

3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.

4. Leaking customer pipes or faulty sprinklers shall be repaired within five (5) working days or less if warranted by the severity of the problem.

5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. Pool draining and refilling shall be allowed only for health, maintenance, or structural considerations.

6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health, esthetic or sanitary purposes, is prohibited.

7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.

8. Reduce landscape and pasture irrigation by 5 – 10%. Customers with "smart" irrigation timers or controllers are asked to set their controllers to achieve 90 to 95% of the evapotranspiration (ET) rate. Drip irrigation systems are excluded from this requirement.

9. Reduce indoor water use by 5 – 10%. Contact your water provider for tips and techniques to reduce indoor water use.

10. Users of construction meters and fire hydrant meters will be monitored for efficient water use.

STAGE 3 – WATER WARNING

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.

2. Water shall be confined to the customer's property and shall not be allowed to run-off to adjoining properties or to the roadside ditch or gutter. Care shall be taken not to water past the point of saturation.

3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.

4. Leaking customer pipes or faulty sprinklers shall be repaired within two (2) working days or less if warranted by the severity of the problem.

5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. Pool draining and refilling shall be allowed only for health, maintenance, or structural considerations.

6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health, esthetic or sanitary purposes, is prohibited.

7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.

8. Reduce landscape and pasture irrigation by 11 – 25%. Customers with "smart" irrigation timers or controllers are asked to set their controllers to achieve 75 to 89% of the evapotranspiration (ET) rate. Drip irrigation systems are excluded from this requirement.

9. Reduce indoor water use by 11 – 25%. Contact your water provider for tips and techniques to reduce indoor water use.

10. Restaurants shall serve water only upon request.

11. Users of construction meters and fire hydrant meters will be monitored for efficient water use.

STAGE 4 – WATER CRISIS: SHORT-TERM

The declaration of Short-Term Stage 4 water conservation requirements may be declared by the agency's General Manager or his/her designee and subject to ratification by the agency's Board of Directors in a regular or special session. A short-term declaration is for water shortage conditions expected for a duration of 45 days or less.

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.

2. Water shall be confined to the customer's property and shall not be allowed to run-off to adjoining properties or to the roadside ditch or gutter. Care shall be taken not to water past the point of saturation.

3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.
4. Leaking customer pipes or faulty sprinklers shall be repaired within 24 hours or less if warranted by the severity of the problem.

5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. No potable water from the District's system shall be used to fill or refill swimming pools, artificial lakes, ponds, or streams. Water use for ornamental ponds and fountains is prohibited.

6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health or sanitary purposes, is prohibited.

7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.

8. Reduce landscape and pasture irrigation by 26 – 50%. Customers with "smart" irrigation timers or controllers are asked to set their controllers to achieve 50 to 74% of the evapotranspiration (ET) rate. Drip irrigation systems are NOT excluded from this requirement.

9. Reduce indoor water use by 26 - 50%. Contact your water provider for tips and techniques to reduce indoor water use.

10. Restaurants shall serve water only upon request.

11. Flushing of sewers or fire hydrants is prohibited except in case of emergency and for essential operations.

12. Users of construction meters and fire hydrant meters will be monitored for efficient water use. Use of reclaimed water for construction purposes is encouraged.

13. Installation of new turf or landscaping is prohibited.

14. Automobiles or equipment shall be washed only at commercial establishments that use recycled or reclaimed water.

STAGE 4 – WATER CRISIS: LONG-TERM

The declaration of Long-Term Stage 4 water conservation requirements will be by the agency's Board of Directors in a regular or special session. A long-term declaration is for water shortage conditions expected for a duration of more than 45 days.

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.

2. Water shall be confined to the customer's property and shall not be allowed to run-off to adjoining properties or to the roadside ditch or gutter. Care shall be taken not to water past the point of saturation.

3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.

4. Leaking customer pipes or faulty sprinklers shall be repaired within 24 hours or less if warranted by the severity of the problem.

5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. No potable water from the District's system shall be used to fill or refill swimming pools, artificial lakes, ponds, or streams. Water use for ornamental ponds and fountains is prohibited.

6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health or sanitary purposes, is prohibited.

7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.

8. Reduce landscape and pasture irrigation by 26 – 50%. Customers with "smart" irrigation timers or controllers are asked to set their controllers to achieve 50 to 74% of the evapotranspiration (ET) rate. Drip irrigation systems are NOT excluded from this requirement.

9. Reduce indoor water use by 26 - 50%. Contact your water provider for tips and techniques to reduce indoor water use.

10. Restaurants shall serve water only upon request.

11. Flushing of sewers or fire hydrants is prohibited except in case of emergency and for essential operations.

12. Water for flow testing and construction purposes from water agency fire hydrants and blow-offs is prohibited. Use of reclaimed water for construction purposes is encouraged.

13. Installation of new turf or landscaping is prohibited.

14. Automobiles or equipment shall be washed only at commercial establishments that use recycled or reclaimed water.

15. Water Crisis/Emergency tiered pricing will be implemented.

16. No commitments will be made to provide service for new water service connections.

STAGE 5 – WATER EMERGENCY: SHORT-TERM

The declaration of Short-Term Stage 5 water conservation requirements may be declared by the agency's General Manager or his/her designee and subject to ratification by the agency's Board of Directors in a regular or special session. A short-term declaration is for water shortage conditions expected for a duration of 45 days or less.

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.

2. Landscape and pasture irrigation is prohibited.

3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.

4. Leaking customer pipes or faulty sprinklers shall be repaired immediately. Water service will be suspended until repairs are made.

5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. No potable water from the District's system shall be used to fill or refill swimming pools, artificial lakes, ponds, or streams. Water use for ornamental ponds and fountains is prohibited.

6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health or sanitary purposes, is prohibited.

7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.

8. Reduce indoor water use by more than 50%. Contact your water provider for tips and techniques to reduce indoor water use.

9. Restaurants shall serve water only upon request.

10. Water for flow testing and construction purposes from water agency fire hydrants and blow-offs is prohibited. No potable water from the District's system shall be used for construction purposes including but not limited to dust control, compaction, or trench jetting. Use of reclaimed water for construction purposes is encouraged.

11. Flushing of sewers or fire hydrants is prohibited except in case of emergency and for essential operations.

12. Installation of new turf or landscaping is prohibited.

13. Automobiles or equipment shall be washed only at commercial establishments that use recycled or reclaimed water.

STAGE 5 – WATER EMERGENCY: LONG-TERM

The declaration of Long-Term Stage 5 water conservation requirements will be by the agency's Board of Directors in a regular or special session. A long-term declaration is for water shortage conditions expected for a duration of more than 45 days.

1. Water shall be used for beneficial purposes only; all unnecessary and wasteful uses of water are prohibited.

2. Landscape and pasture irrigation is prohibited.

3. Free-flowing hoses for all uses are prohibited. Automatic shut-off devices shall be attached on any hose or filling apparatus in use.

4. Leaking customer pipes shall be repaired immediately. Water service will be suspended until repairs are made.

5. All pools, spas, and ornamental fountains/ponds shall be equipped with a recirculation pump and shall be constructed to be leak-proof. No potable water from the District's system shall be used to fill or refill swimming pools, artificial lakes, ponds, or streams. Water use for commercial and multi-family residential ornamental ponds and fountains is prohibited.

6. Washing streets, parking lots, driveways, sidewalks, or buildings, except as necessary for health or sanitary purposes, is prohibited.

7. Customers are encouraged to take advantage of the water agency's conservation programs and rebates.

8. Reduce indoor water use by more than 50%.

9. Restaurants shall serve water only upon request.

10. Water for flow testing and construction purposes from water agency fire hydrants and blow-offs is prohibited. No potable water from the District's system shall be used for construction purposes including but not limited to dust control, compaction, or trench jetting. Use of reclaimed water for construction purposes is encouraged.

11. Flushing of sewers or fire hydrants is prohibited except in case of emergency and for essential operations.

12. Installation of new turf or landscaping is prohibited.

13. Automobiles or equipment shall be washed only at commercial establishments that use recycled or reclaimed water.

14. New connections to the District water distribution system will not be allowed.

15. Water Crisis/Emergency tiered pricing will be implemented.

16. No commitments will be made to provide service for new water service connections.

San Juan Surface Water Supply & Shortage Plan

I. Recitals

A. San Juan is the owner of certain surface water rights and contractual water entitlements, and facilities and entitlements for the diversion, treatment and conveyance of water from Folsom Reservoir, to make available treated water supplies within it wholesale and retail service area that benefit all members of the San Juan Family of Agencies (Member Agencies).

B. All San Juan Member Agencies are bound by the Water Forum Agreement to specified reductions in the amount of surface water that can be diverted from the American River during specified hydrologic events.

C. To manage water demands in excess of available surface water supplies, for any reason, it is the intent of the Member Agencies that these shortages conditions be addressed by using groundwater.

D. Citrus Heights Water District, Fair Oaks Water District, and Orange Vale Water Company are the owners of groundwater production facilities.

E. Solutions to address reductions in surface water diversions by using groundwater have been developed to the mutual benefit and interest of all Member Agencies.

F. Water supply shortage solutions will be consistent with the terms of each Agency's Water Forum purveyor-specific agreement, and will not adversely impact implementation of the Water Forum's lower American River flow management plan.

G. The water supply shortage solutions will be implemented in a manner that protects the water supply and financial interests of affected ratepayers, including their investment in existing facilities.

H. Those Member Agencies that are beneficiaries of a solution will pay for the full benefit received.

I. San Juan will be the manager of the Shortage program and in that role will contract for groundwater and be the accountant for groundwater usage and costs.

J. The Family members agree as follows:

1. Definitions. When used in this Plan:
   - A. "Benefitting Agencies" means those Member Agencies that receive additional allotments of surface water during a shortage year by virtue of other Member Agencies using groundwater.
   - B. "Capital Costs" are defined as those costs for new groundwater production facilities.
   - C. "Commodity Costs" are those costs directly associated with the operation of groundwater facilities for the production of groundwater during a water shortage.
   - D. "Groundwater Suppliers" means those Member Agencies that have available groundwater in excess of their own needs under all but emergency shortage conditions.

E. "Emergency Shortages," means those shortages in surface water deliveries resulting from actions other than a Water Forum based cutback in diversions, and could include no surface water deliveries.

F. "Groundwater Production Facilities" means wells, pumps, piping, electrical controls and other physical components that are necessary for the production and distribution of groundwater.

G. "Level of Service" means the amount of water available to retail customers when compared to historical demands during normal water years.

H. "Member Agencies" means the following retail water service providers receiving wholesale water service from San Juan, and the retail water service customers of San Juan: (1) Citrus Heights Water District; (2) Fair Oaks Water District; (3) Orange Vale Water Company; (4) San Juan in its capacity as a retail water service provider; and (5) the City of Folsom.

I. "Operational and Maintenance Costs" are defined as costs (labor, parts, supplies, etc.) for routine maintenance of the groundwater production facilities necessary to insure that when groundwater is needed, the production capacity will be there.

J. "Period of Shortage" means the years, or periods of time, when surface water availability to the Member Agencies is reduced, and groundwater is used to supplement the available surface water supply to meet the desired level of service.

K. "San Juan" means the San Juan Water District.

L. "San Juan's Water Treatment and Conveyance Facilities" means the water diversion, pumping, treatment and conveyance facilities that are used by San Juan to make surface water available to the Member Agencies.

M. "Water Forum Agreement" refers to the Memorandum of Understanding dated January 2000, among the various signatories that has seven complimentary actions, one of which is the Groundwater Management Element.

N. "Water Forum Shortages" shall mean those reductions in surface water as specified in the Water Forum Agreement.

II. Surface Water Supply Shortage

A. San Juan will be responsible for monitoring the Unimpaired Inflow into Folsom Reservoir as provided for in the Water Forum Agreement, and will keep the Member Agencies apprised of the projected water availability for the water year.

B. Surface water availability will be in accordance with the conditions of the Water Forum Agreement or USBR reductions of contract water supplies, shortage will be declared by San Juan in consultation with the Member Agencies.

C. Reductions in surface water deliveries in accordance with the Water Forum Agreement or USBR reductions of contract water supplies will only be made after other remedies for additional surface water have been exhausted.
D. San Juan in consultation with other Member Agencies will determine the amount of groundwater that must be supplied to achieve the agreed upon level of service for each Member Agency.
E. Operation of Groundwater facilities and surface water system shall be coordinated by San Juan. San Juan shall be responsible for notifying the Groundwater Suppliers of their obligations for the water year.
F. Groundwater facilities are the property of the appropriate Member Agencies and will only be operated by that Family member.
G. Member Agencies that do not have access to groundwater will receive surface water in an amount necessary to meet the service level determined by the Member Agencies.
H. Non-emergency or shortage condition reductions in surface water deliveries by San Juan or U.S. Bureau of Reclamation for maintenance shall only be made subsequent to an announcement by either of planned maintenance activities.

IV. Availability of Groundwater Facilities

A. Citrus Heights Water District, Fair Oaks Water District and Orange Vale Water Company shall independently determine how much groundwater they have available for sale to other family members assuming Dry Year conditions under the Water Forum.
B. San Juan shall contract with each Member Agency for the amount of groundwater they have determined that is surplus to their Water Forum needs and is needed by San Juan for its wholesale obligations.
C. In consultation with all Member Agencies, after a shortage is declared, San Juan shall determine how much groundwater is needed to meet its wholesale obligations under Dry Year conditions and will designate how much Groundwater each Groundwater Provider must provide.

III. Operation & Maintenance of Groundwater Facilities

A. Each Groundwater supplier shall maintain their facilities in accordance with the agreed upon maintenance schedule presented in Appendix A.
B. Annually, each Groundwater supplier shall submit a summary of Operation and Maintenance work performed to San Juan. In addition, the Groundwater supplier shall submit an updated 5 year CIP list for Groundwater facilities that have been contracted for by San Juan.

IV. Wholesale Rates and Charges

A. Rates and charges shall consist of three components: (1) capital costs for new or replacement elements; (2) operation and maintenance costs; and, (3) commodity costs. *Groundwater suppliers shall develop and submit cost estimates for each component to the Member Agencies for review and concurrence. San Juan shall include these costs in the next Wholesale Water Rate Study.* ***This element needs some thought with regard to how it is developed and how is it updated. Having the rate consultant review the costs would provide for a defensible position on making sure that no one benefits at the expense of another party. The costs should not include capital costs. See C below.***

B. Each Groundwater Supplier will submit San Juan a bill for operation and maintenance, and commodity costs on a quarterly basis. San Juan will prorate the billing and bill the appropriate Member Agencies for their fair share. ***Do we want to follow the same format as Wholesale charges, ie bill in the future and correct?***

C. Capital costs for new or replacement groundwater infrastructure shall be developed by the Groundwater supplier and submitted to the benefitting groundwater users for *review, evaluation, and agreement*. Payment by each benefitting party for their share of capital costs shall be made to the Member Agency responsible for the project. ***Thought here is that how the benefitting party pays for the improvement is an internal affair.***

V. General Provisions

A. **Periodic Review; Amendment**. San Juan and the Member Agencies will meet not less than once every year to review the maintenance plan, and maintenance activities performed to date. Amendments to this Shortage Plan must be approved by all Member Agencies.

APPENDIX F

Prohibited Practices and Enforcement Measures

SAN JUAN WATER DISTRICT
CODE OF ORDINANCES

ORDINANCE TYPE: District Operations
ORDINANCE TITLE: Prohibited Practices and Enforcement Measures
ORDINANCE NUMBER: 11000
DATE ADOPTED: July 28, 2006
DATES AMENDED:

The District may refuse to furnish water and may discontinue water service to any Premises where apparatus, appliances or equipment using water is found by the General Manager or his/her agent to be dangerous, unmaintained, inaccessible, or unsafe, where the use of water on such Premises is found to be detrimental or injurious to the facilities or water service furnished by the District to other Customers, where negligent or wasteful use of water exists that affects the District's water service, where a Customer violates any District ordinance, rule or regulation or breaches any agreement made with the District, or to protect the District from fraud or abuse.

No one except an authorized District employee, agent, contractor or permittee shall at any time operate, interfere with or tamper with the District water service mains, pipes, meters, valves, connections, or any other parts or facilities of the water system.

No ground wire or electric circuit shall be attached or grounded to any District pipe, plumbing or other facilities. Any Person who makes, or permits to be made, such a connection will be liable to the District for any damage, loss or injury resulting from the connection.

11000.01 Leaks or Wasteful Use of Water

Water shall be used only for beneficial uses. All unnecessary and wasteful uses of water are prohibited. No Customer shall knowingly permit leaks or other wasteful use of water.

11000.01.1 Wasteful Use of Water Defined

Wasteful use of water shall be defined as including but not limited to, permitting water to escape onto roads or flow above or below ground to neighboring property, onto land previously irrigated and over-saturated or by flooding property to an unreasonable depth or in an unreasonable

amount for any reason.

11000.01.2 Water Service Discontinued

Water service may be discontinued to Customers found to be wasting water until the conditions causing such waste have been remedied to the satisfaction of the District.

11000.02 Enforcement Measures

In the event of violation of any terms of this Code of Ordinances, other than failure of a Customer billed or the owner of any Premises to pay any water service charge prior to delinquency, the General Manager may discontinue water service and disconnect the Premises from the District water service system by the following procedures.

11000.02.1 Written Notice to Customers

At least ten days before the proposed discontinuance, the District shall provide written notice to the Customer and the property owner, if other than the Customer, of the District's intent to discontinue service and the grounds upon which the action is taken. Notice shall be mailed to the address of record and hand delivered to the service address.

11000.02.2 Customer Right of Review

Before discontinuance of service, the Customer or property owner shall have the opportunity to discuss the reason for the proposed discontinuance with the General Manager, or his or her designee, who shall be empowered to review all letters and statements, rectify any errors, and settle controversies pertaining to the discontinuance of service.

11000.02.3 Dates for Discontinuance of Service

No service shall be discontinued on any Saturday, Sunday, legal holiday, or any time during which the District's business offices are not open to the public, except for an emergency condition that requires the service to be terminated to avoid property damage or health or safety concerns.

11000.02.4 Penalty for Unauthorized Service Connection

A penalty plus costs incurred may be assessed for each unauthorized service found to be connected to a private or District pipeline. See Appendix C for the current Unauthorized Connection Fee.

11000.03 Non-Service Areas

11000.03.1 Except as provided in Section 12000 of this Code, no Customer may use or permit use of water for any Premises other than that described in the application for service or for any Premises outside the boundaries of the District.

11000.03.2 Water service shall not be supplied to more than one parcel of land through one meter or service connection. A "parcel" shall be deemed to mean land or property identified as a parcel by the County Tax Assessor.

11000.04 Resale of Water

Customer may not resell, transfer or assign any portion of the water furnished by the District except upon prior written approval from the District in accordance with Section 13000.05.

11000.05 Fire Hydrants or Other District Facilities

No Person may withdraw water from any fire hydrant, blow-off valve, or other connection to the facilities of the District without a permit. Such permit shall provide that all withdrawals shall be made through a meter. Additional permit requirements are set forth in Section 12000.03.2, Classes E and F. The provisions of this paragraph shall not apply to withdrawals of water made from fire hydrants or other facilities for fire department purposes or to withdrawals made by other governmental agencies with prior District approval.

11000.06 Meter Locations

No meter shall be located for District service other than as follows:

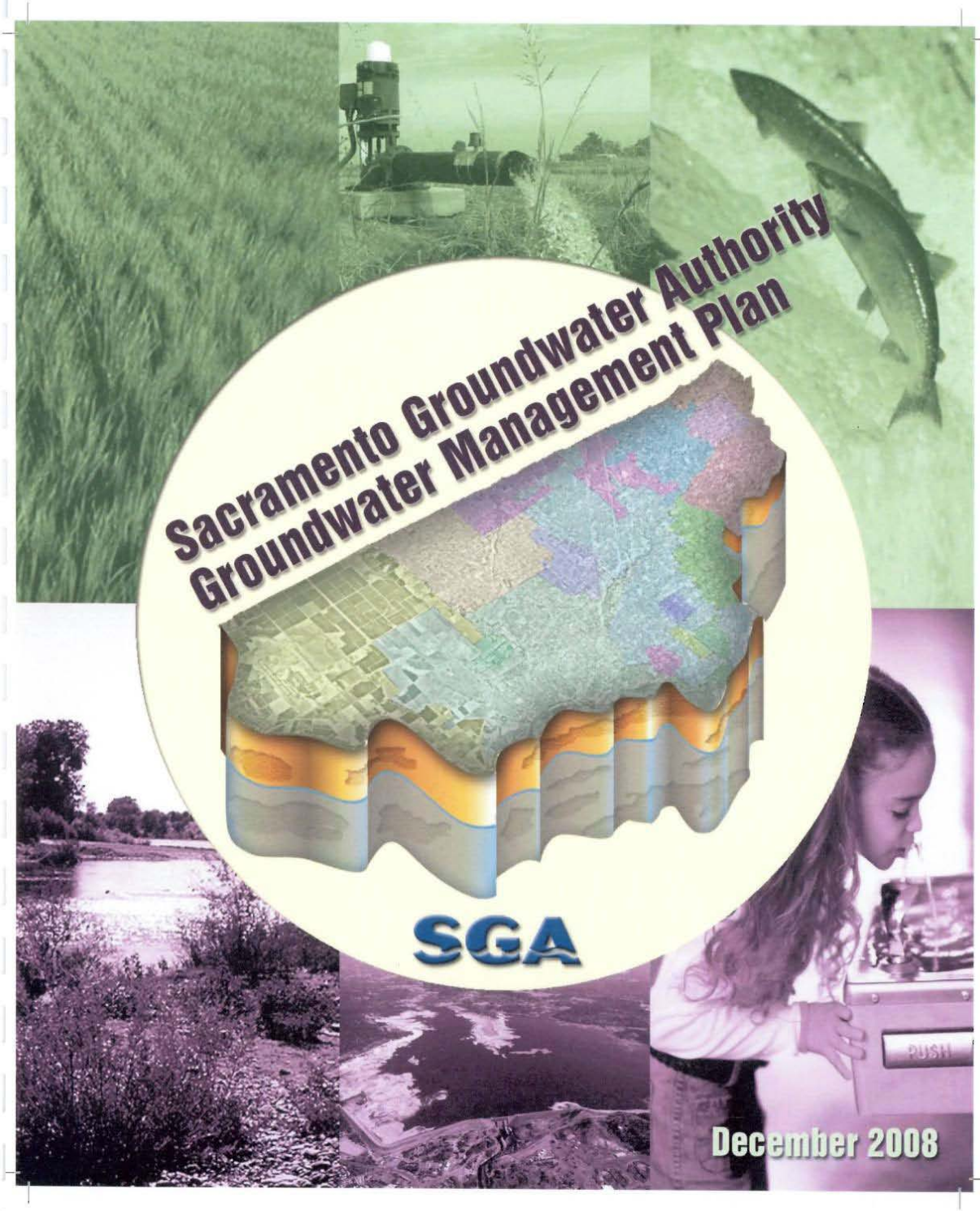
Except as stated in Paragraphs 13000.04 and 13000.05, meters must front the property that they serve and are installed in the general desired location adjacent to the property line or edge of an easement subject to District approval.

11000.07 Remote Meters

Remote meters shall not be permitted unless the District determines that a remote meter is necessary due to extraordinary circumstances.

APPENDIX G

Groundwater Management Plan (cover page)



http://www.sgah2o.org/sga/files/2008-SGA-GMP-FINAL-20090206-print_ready.pdf

APPENDIX H

2008 Water Quality Report

2008 Consumer Confidence Report
Published by the
San Juan Family of Water Agencies
P.O. Box 2157
Granite Bay, CA 95746

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Printed on recycled paper.

Once again, your drinking water continues to meet all state and federal drinking water standards.

CONTACT US If you have any questions about this report or your water supply, please contact your local water provider. Each of the member agencies holds monthly board meetings that are open to the public as indicated below.

San Juan Water District	Citrus Heights Water District	Fair Oaks Water District	Orange Vale Water Company
Contact Person: Bill Sadler (916) 791-1715 bsadler@sjwd.org www.sjwd.org	**Contact Person:** Brian Hensley (916) 725-6873 bhensley@chwd.org www.chwd.org	**Contact Person:** Michael Nisenboym, P.E. (916) 967-5002 x113 mnisenboym@fowd.com www.fowd.com	**Contact Person:** John Wingerter (916) 988-1693 jwingerter@orangevalewater.com
Board Meetings: 2nd Wednesday each month 7 p.m. 9935 Auburn-Folsom Road Granite Bay	**Board Meetings:** 2nd Tuesday each month 6:30 p.m. 6230 Sylvan Road Citrus Heights	**Board Meetings:** 2nd Monday each month 6:30 p.m. 10317 Fair Oaks Boulevard Fair Oaks	**Board Meetings:** 1st Tuesday each month 6 p.m. 9031 Central Avenue Orangevale

See how water flows from Mother Nature to you at www.sjwd.org

2008 Consumer Confidence Report

Published by the San Juan Family of Water Agencies
San Juan Water District • Citrus Heights Water District • Fair Oaks Water District • Orange Vale Water Company

The United States Environmental Protection Agency (USEPA) and the State Department of Public Health (Department) have established strict quality standards for drinking water. These standards are designed to protect consumers from waterborne disease organisms and harmful chemicals. Each year, USEPA requires public water systems to provide their consumers with a report containing information about drinking water quality and compliance with the standards. This Consumer Confidence Report (CCR) summarizes the most recent testing of your drinking water and includes a comparison of detectable constituents in your drinking water to those standards. This year's CCR concludes, once again, that your drinking water meets all federal and state drinking water standards. The San Juan Family of Water Agencies (Agencies) is committed to ensuring the delivery of a reliable, high-quality water supply at a reasonable cost to all consumers. The Agencies consist of four water providers: San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, and Orange Vale Water Company. Together they serve northeastern Sacramento County and portions of south Placer County, including Granite Bay.

WHAT'S IN YOUR WATER?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

WHERE DOES YOUR WATER COME FROM?

Water from the Agencies comes from two sources: treated surface water and groundwater. San Juan Water District diverts and treats surface water from Folsom Lake. This treated water is then distributed to the Agencies. Orange Vale Water Company and San Juan Water District receive 100 percent of their supply from treated surface water. If you are a consumer of Citrus Heights or Fair Oaks water districts, your water is a mixture of treated surface water from San Juan Water District and groundwater from local wells.

SJWD – 100% surface water
OVWC – 100% surface water
CHWD – 98% surface water, 2% groundwater
FOWD – 82.6% surface water, 17.4% groundwater

Source water assessments have been conducted for all the water sources to enable the Agencies to understand the activities that have the greatest potential for contaminating the drinking water supplies. The groundwater sources were assessed in 2002 and the surface water source was evaluated in 2001. A new well for Citrus Heights Water District was assessed in 2008. These assessments were conducted in accordance with Department guidelines and copies of the complete assessments are available for review at the respective agency offices.

San Juan Water District conducted the evaluation of the Folsom Lake source. It was found to be most vulnerable to potential contamination from the Folsom Lake State Recreation Area facilities, high-density housing and associated activities such as sewer and septic systems and fertilizer, pesticide and herbicide application, as well as illegal activities and dumping. The source water is treated using conventional filtration and disinfection that is designed to remove many contaminants. Again this year, your water meets all federal and state drinking water standards.

Citrus Heights and Fair Oaks water districts conducted assessments of their local groundwater wells. It was found that all the wells are vulnerable to commercial urban activities, such as active and historic gas stations, dry cleaners, leaking underground storage tanks, and sewer collection systems, none of which are associated with any detected contaminants.

Although Orange Vale Water Company does not currently utilize available local groundwater, assessments found that wells within their service area would be most vulnerable to rural grazing activities.

HOW TO READ THE CCR

Find your water supplier along the top of the chart. You will need to look at both San Juan surface water and the groundwater supplies if you receive water from Citrus Heights or Fair Oaks water districts. If you don't know who your water supplier is, we would be happy to help you. Please call San Juan Water District at 791-0115. You can then compare the levels of your water supply to the federal and state standards.

KEY TO ABBREVIATIONS

PPB	parts per billion or micrograms per liter (µg/L)
PPM	parts per million or milligrams per liter (mg/L)
MFL	million fibers per liter (>10µm long)
NTU	nephelometric turbidity units
µS/CM	microsiemens per centimeter
pCi/L	picocuries per liter
ND	not detected
NR	not required
N/A	not applicable
TOC	total organic carbon

Maximum Contaminant Level (MCL) — The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Public Health Goal (PHG) — The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG) — The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL) — The level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG) — The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

Primary Drinking Water Standard (PDWS) — MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Treatment Technique (TT) — A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL) — The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Notification Level (NL) — Health-based advisory level set by the Department for constituents with no MCL. This is not an enforceable standard, although requirements and recommendations may apply if detected above this level.

IMPORTANT INFORMATION ABOUT RADON

Radon is a radioactive gas that you can't see, taste or smell. It is found throughout the United States. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will, in most cases, be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call the California Radon Program (1-800-745-7236) or call EPA's Radon Hotline at (1-800-SOS-RADON).

A NOTE FOR SENSITIVE POPULATIONS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

SAN JUAN FAMILY OF WATER AGENCIES

2008 TABLE OF DETECTED CONSTITUENTS

DETECTED PRIMARY DRINKING WATER CONSTITUENTS regulated to protect your health

CONSTITUENT	UNITS	PHG or (MCLG) or [MRDLG]	MCL or [MRDL]	San Juan Surface Water (including Orange Vale Water Company)			Citrus Heights Groundwater			Fair Oaks Groundwater			MAJOR SOURCES
				RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	
Arsenic	PPB	0.004	10	ND	ND	2008	ND-3.3	ND	2008	2.3-3.1	2.7	2008	Erosion of natural deposits
Barium	PPM	2	1	ND	ND	2008	ND-0.1	ND	2008	ND	ND	2008	Erosion of natural deposits
Fluoride	PPM	1	2.0	ND	ND	2008	0.15-0.26	0.19	2008	ND	ND	2008	Erosion of natural deposits
Nitrate (as nitrate)	PPM	45	45	ND	ND	2008	5-16	8.9	2008	ND-2.8	ND	2008	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Asbestos	MFL	7	7	ND - 0.2	ND	2006	NO	NO	2008	ND	ND	2001, 2008	Erosion of natural deposits
Chlorine Residual - distribution system	PPM	[4]	[4]	0.12-1.1 (0.82-1.05)	0.87 (0.95)	2008	0.19-1.2	0.89	2008	0.13-0.98	0.57	2008	Drinking water disinfectant added for treatment
Total Trihalomethanes - distribution system	PPB	NONE	80	8-50 (13-34)	35 (24.0)	2008	5-47	28.8	2008	5.8-52	20.8	2008	By-product of drinking water chlorination
Haloacetic Acids - distribution system	PPB	NONE	60	8-27 (12-25)	19.5 (17.4)	2008	2-21	14.5	2008	2.5-32	12.1	2008	By-product of drinking water chlorination
Control of Disinfection By-Product Precursors (TOC) (raw water) (b)	PPM	NONE	TT=2	1.3-1.8	1.4	2008	NR	N/A	N/A	NR	N/A	N/A	Various natural and manmade sources
CONSTITUENT	UNITS	PHG OR (MCLG)	MCL	LEVEL FOUND		YEAR SAMPLED	LEVEL FOUND		YEAR SAMPLED	LEVEL FOUND		YEAR SAMPLED	MAJOR SOURCES
Turbidity (b)	NTU	NONE	TT=1 NTU	0.039		2008	NR		N/A	NR		N/A	Soil runoff
	% Samples	NONE	TT=<0.3 NTU	99.999		2008	NR		N/A	NR		N/A	
CONSTITUENT	UNITS	PHG OR (MCLG)	AL	90th Percentile	# Sites Sampled / # Sites Exceed AL	YEAR SAMPLED	90th Percentile	# Sites Sampled / # Sites Exceed AL	YEAR SAMPLED	90th Percentile	# Sites Sampled / # Sites Exceed AL	YEAR SAMPLED	MAJOR SOURCES
Copper	PPM	0.3	1.3	ND (0.061)	30/0 (30/0)	2006 (2008)	NO	30/0	2006	ND	30/0	2007	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

DETECTED SECONDARY DRINKING WATER CONSTITUENTS regulated for aesthetic qualities

CONSTITUENT	UNITS	PHG or (MCLG)	MCL	San Juan Surface Water (including Orange Vale Water Company)			Citrus Heights Groundwater			Fair Oaks Groundwater			MAJOR SOURCES
				RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	
Color	UNITS	NONE	15	ND	ND	2006	ND-15	2.8	2008	ND	ND	2008	Naturally-occurring organic materials
Odor	UNITS	NONE	3	ND-2	1	2006	ND-1	ND	2008	ND	ND	2008	Naturally-occurring organic materials
Manganese	PPB	NONE	50	ND	ND	2006	ND-30	ND	2008	ND	ND	2008	Leaching from natural deposits
Chloride	PPM	NONE	500	ND-2.9	1.6	2008	14-19	15.8	2008	2.6-23	8.7	2008	Runoff/leaching from natural deposits
Specific Conductance	µS/CM	NONE	1,600	39.4-85	60.3	2008	260-330	302.5	2008	120-550	240	2008, 2008	Substances that form ions when in water
Sulfate	PPM	NONE	500	ND-6.6	3	2006	6.2-11	9.8	2008	4-28	11.2	2008	Runoff/leaching from natural deposits
Turbidity	NTU	NONE	5	0.015-0.038	0.025	2008	0.22-3.8	1.5	2008	0.8	0.8	2008	Soil runoff
Total Dissolved Solids	PPM	NONE	1,000	26-54	40.0	2006	160-260	227.5	2008	96-400	184	2006	Runoff/leaching from natural deposits

DETECTED UNREGULATED DRINKING WATER CONSTITUENTS (c)

CONSTITUENT	UNITS	PHG or (MCLG)	NL	San Juan Surface Water (including Orange Vale Water Company)			Citrus Heights Groundwater			Fair Oaks Groundwater			MAJOR SOURCES
				RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	RANGE	AVERAGE	YEAR SAMPLED	
Hardness	PPM	NONE	NONE	16-34	23.8	2006	90-160	116.5	2008	44-210	93	2006, 2008	Hardness is the sum of polyvalent cations present in the water, generally naturally occurring magnesium and calcium.
Sodium	PPM	NONE	NONE	1.5-2.7	2.3	2006	12-24	18.3	2008	5.4-32	11.9	2008, 2008	Naturally occurring salt in the water
Calcium	PPM	NONE	NONE	4.2-10	8.8	2008	22-35	28.3	2008	11-45	19.8	2006, 2008	Erosion of natural deposits
Magnesium	PPM	NONE	NONE	1.3-2.2	1.8	2008	8.4-14	12.4	2008	4-25	9.3	2006, 2008	Erosion of natural deposits
Boron	PPB	NONE	1,000	ND	ND	2002	ND-110	ND	2004	ND	ND	2003	Erosion of natural deposits
Hexavalent Chromium	PPB	NONE	NONE	ND	ND	2006	ND-2	1.1	2006	ND	ND	2003	Erosion of natural deposits
Vanadium	PPB	NONE	50	ND	ND	2006	6.3-10	7.9	2004	ND	ND	2003	Erosion of natural deposits
Radon 222	pCi/L	NONE	NONE	ND	ND	2008	165	165	2008	114-333	215	2005	Erosion of natural deposits

(a)--Data for OVWC Distribution System is shown in parenthesis
(b)--Only surface water sources must comply with PDWS for Control of Disinfection By-Product Precursors and turbidity.
(c)--Unregulated contaminant monitoring helps determine where certain contaminants occur and whether they need to be regulated.
The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

APPENDIX I

CUWCC 2009 and 2011 Annual Best Management Plan Reports

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

Link to FAQs

2009

BMP 1.1 Operations Practices

Comments:

See the complete MOU: View MOU

See the coverage requirements for this BMP:

Conservation Coordinator

Conservation Coordinator ◯ Yes ◯ No

Contact Information

First Name	Vicki
Last Name	Sacksteder
Title	Water Resources Analyst
Phone	916-791-6933
Email	vsacksteder@sjwd.org

Note that the contact information may be the same as the primary contact information at the top of the page. If this is your case, excuse the inconvenience but please enter the information again.

Water Waste Prevention

Water Agency shall do one or more of the following:

a. Enact and enforce an ordinance or establish terms of service that prohibit water waste
b. Enact and enforce an ordinance or establish terms of service for water efficient design in new development
c. Support legislation or regulations that prohibit water waste
d. Enact an ordinance or establish terms of service to facilitate implementation of water shortage response measures
e. Support local ordinances that prohibit water waste
f. Support local ordinances that establish permits requirements for water efficient design in new

To document this BMP, provide the following:

a. A description of, or electronic link to, any ordinances or terms of service
b. A description of, or electronic link to, any ordinances or requirements adopted by local jurisdictions or regulatory agencies with the water agency's service area.
c. A description of any water agency efforts to cooperate with other entities in the adoption or enforcement of local requirement
d. description of agency support positions with respect to adoption of legislation or regulations

You can show your documentation by providing files, links (web addresses), and/or entering a description.

File name(s): Email files to natalie@cuwcc.org 11000 Prohibited Practices.pdf

Web address(s) URL: comma-separated list

Enter a description: San Juan Water District Code of Ordinances, Section 23000 District Water Conservation Program, amended August 1, 2008.

SAN JUAN WATER DISTRICT
CODE OF ORDINANCES

ORDINANCE TYPE: District Operations
ORDINANCE TITLE: Prohibited Practices and Enforcement Measures
ORDINANCE NUMBER: 11000
DATE ADOPTED: July 28, 2006
DATES AMENDED: August 1, 2008

The District may refuse to furnish water and may discontinue water service to any Premises where apparatus, appliances or equipment using water is found by the District to be dangerous, unmaintained, inaccessible, or unsafe, where the use of water on such Premises is found to be detrimental or injurious to the facilities or water service furnished by the District to other Customers, where negligent or wasteful use of water exists that affects the District's water service, where a Customer violates any District ordinance, rule or regulation or breaches any agreement made with the District, or to protect the District from fraud or abuse.

No one except an authorized District employee, agent, contractor or permittee shall at any time operate, interfere with or tamper with the District water service mains, pipes, meters, valves, connections, or any other parts or facilities of the water system.

No ground wire or electric circuit shall be attached or grounded to any District pipe, plumbing or other facilities. Any Person who makes, or permits to be made, such a connection will be liable to the District for any damage, loss or injury resulting from the connection.

11000.01 Leaks or Wasteful Use of Water

Water shall be used only for beneficial uses. All unnecessary and wasteful uses of water are prohibited. No Customer shall knowingly permit leaks or other wasteful use of water.

11000.01.1 Wasteful Use of Water Defined

Wasteful use of water shall be defined as including but not limited to, permitting water to escape onto roads or flow above or below ground to neighboring property, onto land previously irrigated and over-saturated or by flooding property to an unreasonable depth or in an unreasonable amount for any reason.

11000.01.2 Water Service Discontinued

Water service may be discontinued to Customers found to be

wasting water until the conditions causing such waste have been remedied to the satisfaction of the District.

11000.02 Enforcement Measures

In the event of violation of any terms of this Code of Ordinances, other than failure of a Customer to pay their bill, the General Manager may discontinue water service and disconnect the Premises from the District water service system by the following procedures.

11000.02.1 Written Notice to Customers

At least ten days before the proposed discontinuance, the District shall provide written notice to the Customer and the property owner, if other than the Customer, of the District's intent to discontinue service and the grounds upon which the action is taken. Notice shall be mailed to the address of record and hand delivered to the service address.

11000.02.2 Customer Right of Review

Before discontinuance of service, the Customer or property owner shall have the opportunity to discuss the reason for the proposed discontinuance with the General Manager, or his or her designee, who shall be empowered to review all letters and statements, rectify any errors, and settle controversies pertaining to the discontinuance of service (including a decision to rescind or suspend the proposed discontinuance of service).

11000.02.3 Dates for Discontinuance of Service

No service shall be discontinued on any Saturday, Sunday, legal holiday, or any time during which the District's business offices are not open to the public, except for an emergency condition that requires the service to be terminated to avoid property damage or health or safety concerns.

11000.02.4 Penalty for Unauthorized Service Connection

A penalty plus costs incurred may be assessed for each unauthorized service found to be connected to a private or District pipeline. See District's Schedule of Rates, Fees, Charges, and Deposits for the current unauthorized connection fee.

11000.03 Non-Service Areas

11000.03.1 Except as provided in Section 12000 of this Code, no Customer may use or permit use of water for any Premises

other than that described in the application for service or for any Premises outside the boundaries of the District.

11000.03.2 Water service shall not be supplied to more than one parcel of land through one meter or service connection. A "parcel" shall be deemed to mean land or property identified as a parcel by the County Tax Assessor.

11000.04 Resale of Water

Customer may not resell, transfer or assign any portion of the water furnished by the District except upon prior written approval from the District in accordance with Section 13000.05.

11000.05 Fire Hydrants or Other District Facilities

No Person may withdraw water from any fire hydrant, blow-off valve, or other connection to the facilities of the District without a permit. Such permit shall provide that all withdrawals shall be made through a meter. Additional permit requirements are set forth in Section 12000.03.2, Classes E and F. The provisions of this paragraph shall not apply to withdrawals of water made from fire hydrants or other facilities for fire department purposes or to withdrawals made by other governmental agencies with prior District approval.

11000.06 Meter Locations

No meter shall be located for District service other than as follows:

Except as stated in Paragraphs 13000.04 and 13000.05, meters must front the property that they serve and are installed in the general desired location adjacent to the property line or edge of an easement subject to District approval.

11000.07 Remote Meters

Remote meters shall not be permitted unless the District determines that a remote meter is necessary due to extraordinary circumstances.

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

Link to FAQs

2009

BMP 1.1 Operations Practices

Comments:

See the complete MOU: View MOU

See the coverage requirements for this BMP:

Conservation Coordinator

Conservation Coordinator ◯ Yes ◯ No

Contact Information

First Name	Vicki
Last Name	Sacksteder
Title	Water Resources Analyst
Phone	916-791-6933
Email	vsacksteder@sjwd.org

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f. Support local ordinances that establish permits requirements for water efficient design in new

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b. A description of, or electronic link to, any ordinances or requirements adopted by local jurisdictions or regulatory agencies with the water agency's service area.
c. A description of any water agency efforts to cooperate with other entities in the adoption or enforcement of local requirement
d. description of agency support positions with respect to adoption of legislation or regulations

You can show your documentation by providing files, links (web addresses), and/or entering a description.

File name(s): Email files to natalie@cuwcc.org: 11000 Prohibited Practices.pdf

Web address(s) URL: comma-separated list:

Enter a description: San Juan Water District Code of Ordinances, Section 23000 District Water Conservation Program, amended August 1, 2008.

The fields in red are required.

Agency name: San Juan Water District

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Reporting unit number: 199

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Link to FAQs

View MOU

2009 BMP 1.2 Water Loss Control

Did your agency complete a pre-screening system audit in 2009? Yes ○ No ○

If yes, answer the following:

Determine metered sales in AF: 12,574.00

Definition: other accountable uses not included in metered sales, such as unbilled water use, fire suppression, etc.

Determine system verifiable uses AF: 0.00

Determine total supply into the system in AF: 13,569.00

Does your agency keep necessary data on file to verify the answers above? Yes ○ No ○

Did your agency complete a full-scale system water audit during 2009? Yes ○ No ○

Does your agency maintain in-house records of audit results or the completed AWWA worksheet for the completed audit which could be forwarded to CUWCC? Yes ○ No ○

Did your agency operate a system leak detection program? Yes ○ No ○

Comments:

version 1.0 2009

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

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Link to FAQs

2009 BMP 1.2 Water Loss Control

View MOU

AWWA Water Audit

Agency to complete a Water Audit & Balance Using The AWWA Software ○ Yes ○ No

Email to natalie@cuwcc.org - Worksheets (AWWA Water Audit). Enter the name of the file below:

Water Audit Validity Score from AWWA spreadsheet

Agency Completed Training In The AWWA Water Audit Method ○ Yes ○ No

Agency Completed Training In The Component Analysis Process ○ Yes ○ No

Completed/Updated the Component Analysis (at least every 4 years)? ○ Yes ○ No

Component Analysis Completed/Updated Date: 2010

Water Loss Performance

Agency Repaired All Reported Leaks & Breaks To The Extent Cost Effective ○ Yes ○ No

Recording Keeping Requirements:

Date/Time Leak Reported	Leak Location
Type of Leaking Pipe Segment or Fitting	Leak Running Time From Report to Repair
Leak Volume Estimate	Cost of Repair

Agency Located and Repaired Unreported Leaks to the Extent Cost Effective ○ Yes ○ No

Type of Program Activities Used to Detect Unreported Leaks

Leak detection methods include zone usage monitoring, zone pressure monitoring, and surface conditions. The District contracts with Utility Service Association, Inc. to conduct leak surveys where suspected excessive leakage exists.

Annual Summary Information

Complete the following table with annual summary information (required for reporting years 2-5 only)

Total Leaks Repaired	Economic Value Of Real Loss	Economic Value Of Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken for loss reduction	Cost Of Interventions	Water Saved (AF/Year)

Comments:

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

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Email: vsacksteder@sjwd.org

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BMP 1.3 Metering with Commodity

Link to FAQs

See the complete MOU: View MOU

See the coverage requirements for this BMP:

Implementation

Does your agency have any unmetered service connections? Yes No

If YES, has your agency completed a meter retrofit plan? Yes No

Enter the number of previously unmetered accounts fitted with meters during reporting year:

Are all new service connections being metered? Yes No

Are all new service connections being billed volumetrically? Yes No

Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters? Yes No

Please Fill Out The Following Matrix

Account Type	# Metered Accounts	# Metered Accounts Read	# Metered Accounts Billed by Volume	Billing Frequency Per Year	# of estimated bills/yr
Single-Family	9,761	9,761	9,761	Bi-monthly	6
Multi-Family	120	120	120	Bi-monthly	6
Commericial	236	236	236	Bi-monthly	6
Industrial	11	11	11	Bi-monthly	6
Dedicated Irrigatic	207	207	207	Bi-monthly	6
Agricultural	4	4	4	Bi-monthly	6
Other	8	8	8	Bi-monthly	6
Other				Other	
Other				Other	
Other				Other	

Number of CII Accounts with Mixed-use Meters: 255

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period: 0

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? Yes No

If YES, please fill in the following information:

A. When was the Feasiblity Study conducted

B. Email or provide a link to the feasibility study (or description of):

File name(s): Email files to natalie@cuwcc.org

Web address(s) URL: comma-separated list

General Comments about BMP 1.3:

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

Link to FAQs

2009

BMP 2.1 Public Outreach Cont'd

View MOU

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question related to your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Expense Category	Expense Amount	Personnel Costs Included?	
Regional Water Efficiency Program	$8,420	✔	If yes, check the check box.
Regional Water Efficiency Program	$164,308	✔	
SJWD - Retail	$62,886		

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of how your agency views their importance / effectiveness with respect to conserving water, with the most important/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? ○ Yes ○ No

Public Outreach Additional Information

Public Information Programs	Importance	
The Regional Water Efficiency Program designed and implemented a Community-Ba	$1	

Social Marketing Programs

Branding

Does your agency have a water conservation "brand," "theme" or mascot? ○ Yes ○ No

Describe the brand, theme or mascot.

The Regional Water Efficiency Program uses one overall brand image ("Be Water Smart") and a separate image for the current outdoor water efficiency campaign ("Blue Thumb")

Market Research

Have you sponsored or participated in market research to refine your message? ○ Yes ○ No

Market Research Topic	The Regional Water Efficiency Program conducted a statistically valid telephone survey of 600 customers about water efficiency knowledge, attitudes and behaviors; also written/online surveys of participants in the Community-Based Social Marketing (CBSM) program Blue Thumb Neighbors
Brand Message	"Be Water Smart:" use water wisely/"Blue Thumb:" use water efficiently outdoors
Brand Mission Statement	The "Be Water Smart" and "Blue Thumb" brands both encourage residents to use water efficiently at home. "Blue Thumb" focuses on water efficiency in the landscape where most water use--and water waste--occurs

Community Committees

Do you have a community conservation committee? ○ Yes ◉ No

Enter the names of the community committees: Regional Water Efficiency Public Outreach Subcommittee

Training

Training Type	# of Trainings	# of Attendees	Description of Other
Green Gardener Traini	$4	$122	The Green Gardener Training Program educates local garde

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description
Regional Water Efficien	19920	Designed and implemented a Community-Based Social Marketing (CBSM

Partnering Programs - Partners

Name	Type of Program
☐ CLCA?	
☐ Green Building Programs?	
☐ Master Gardeners?	Maintain a Master Gardener on staff to assist customers with landscaping questions.
☐ Cooperative Extension?	Regional Water Authority provides funding for the Sacramento Cooperative Extension.
☐ Local Colleges?	
☐ Other	

☐ Retail and wholesale outlet; name(s) and type(s) of programs:

Partnering Programs - Newsletters

Number of newsletters per year

Number of customers per year

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities

The Regional Water Efficiency Program partnered with the Sacramento Municipal Utility District to publish an article in SMUD's newsletter "Connections" on the water-energy use connection. This partnership also included a joint Public Service Announcement on the water-

Conservation Gardens

Describe water conservation gardens at your agency or other high traffic areas or new

Recently expanded, this WEL Garden features an inviting entry area, varieties of flowers, groundcovers, gazebos, parking lot landscaping, fire-resistant and deer-resistant plants and an oak tree-compatible and preservation garden that contains native plants and ground cover

Landscape contests or awards

Describe water wise landscape contest or awards program conducted by your agency

Comments:

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

Link to FAQs

2009

BMP 2.1 Public Outreach - Retail Reporting

View MOU

Is a Wholesale Agency Performing Public Outreach?

Are there one or more wholesale agencies performing public outreach which can be counted to help your agency comply with the BMP? ○ Yes ○ No

Enter the name(s) of the wholesale agency (comma delimited)

San Juan Water District - Wholesale

Is your agency performing public outreach?

Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

Public Information Programs List

Did at least one contact take place during each quarter of the reporting year? ✔

Number of Public Contacts		Public Information Programs	
7			
66,318			
30,000			
	Select a public contact		
	Select a public contact		

Contact with the Media

Are there one or more wholesale agencies performing media outreach which can be counted to help your agency comply with the BMP? ● Yes ○ No

Enter the name(s) of the wholesale agency (comma delimited)

San Juan Water District - Wholesale

OR Retail Agency (Contacts with the Media)

Media Contacts List

Did at least one contact take place during each quarter of the reporting year? ✔

Number of Media Contacts	Did at least one contact take place during each quarter of the reporting year?	Media Contact Types	
14	Articles or stories resulting from outreach		
9	News releases		
2	Newspaper contacts		
1	Written editorials		
	Select a type of media contact		
	Select a type of media contact		

Is a Wholesale Agency Performing Website Updates?

Did one or more CUWCC wholesale agencies agree to assume your agency's responsibility for meeting the requirements of and for CUWCC reporting of this BMP? ○ Yes ○ No

Enter the name(s) of the wholesale agency (comma delimited)

San Juan Water District - Wholesale

Is Your Agency Performing Website Updates?

Enter your agency's URL (website address): sjwd.org, rwah2o.org

Describe a minimum of four water conservation related updates to your agency's website that took place during the year:

1. 2009 and 2010- The rebate section of the www.rwah2o.org includes information about toilet, high efficiency clothes washer, smart irrigation controller, cooling tower, commercial rinse and spray valve, pressurized brooms and ice machine retrofit rebates. This section is updated annually with program date changes and at a minimum 4 times per year as rebate amounts change, agency participation changes, new programs are available, and rebate applications are updated.
2. 2009 and 2010-The Green Gardener Training Program information brochure and qualified professionals list are updated on the www.rwah2o.org website and homepage for each Green Gardener Training Program, 2 per year.
3. 2009 and 2010-The calendar of events is updated as information is provided by member agencies and stakeholders. The calendar is updated annually with the annual workshops hosted by the Sacramento Chapter UC Master Gardeners at the Fair Oaks Horticulture Center.
4. The Water-Wise Gardening gallery of plants is updated annually with new plants and watering tips.
5. 2009 and 2010-The Regional Water Efficiency Program created a new Web site (currently http://www.bewatersmart.info/blue-thumb/) for the Blue Thumb outdoor water efficiency campaign. The Web site includes the following: Home Page with overall statistics about outdoor water use (and potential savings) in the Sacramento region; case studies page with video of influencers and every-day people providing tips to others wanting to earn their Blue Thumb; and Pledge Page where visitors can identify five actions to use water efficiently outdoors and earn an incentive prize.
6. 2009 and 2010-The site is updated throughout the year with additional materials (such as audio of the program manager's interview with Farmer Fred Hoffman of KFBK and information about the region's partnership with The Home Depot). (2010)

Did at least one Website Update take place during each quarter of the reporting year? ○ Yes ○ No

Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or brake the budget into discrete categories by entering many rows. Please indicate if personnel costs are included in the entry.

Category	Amount		Personnel Costs Included? If yes, check the box.	Comments	
Regional Water E	$8,420		✔	Consultant only; February-July 2009	
Regional Water E	$164,308		✔	Consultant only,	
SJWD - Retail	$80,000			Does not include consultant costs.	

Comments:

July 2009-December 2010 (includes Blue Thumb Neighbors, also listed under "Social Marketing Expenditures")

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

Link to FAQs

2009

BMP 2.2 School Education Programs, Retail Agencies

View MOU

School Programs

Is a wholesale agency implementing school programs which can be counted to help your agency comply with this BMP? ○ Yes ○ No

Enter Wholesaler Names, separated by commas: San Juan Water District - Wholesale

☐ Materials meet state education framework requirements?

Description of Materials:
- Student supplements, written by an award-winning environmental educator and edited by water agency personnel.
- Teaching materials, online Be Water Smart teacher guides and activities
- California Waterways map
- Student contests for K-4th grades and 5th-8th grades
- Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the program

☐ Materials distributed to K-6 Students?

Description of materials distributed to K-6 Students:
- Student supplements, written by an award-winning environmental educator and edited by water agency personnel.
- Teaching materials, online Be Water Smart teacher guides and activities
- California Waterways map
- K-4 will receive a class set of "Water Conservation and You booklets"
- Student contests for K-4th grades and 5th-8th grades
- Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the program

Number of students reached: 4,247

☐ Materials distributed to 7-12 Students?

Description of materials distributed to 7-12 Students: None

Number of Distribution: 0

Annual budget for school education program: $46,500.00

Description of all other water supplier education programs:
- SJWD - Wholesale sponsors a Poster contest for its retail agencies. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an assortment of gift certificates from local businesses. The teacher of each student who placed in the contest receives $100 for classroom supplies.
- SJWD - Wholesale Participated in a science fair. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an assortment of gift certificates from local businesses. The teacher of each student who placed in the contest receives $100 for classroom supplies.
- The Water Bucks Program was developed as an opportunity to educate students on the efficient use of water. In exchange for student participation in identifying

School Program Activities

Classroom presentations:

Number of presentations: 5 Number of attendees:

Large group assemblies:

Number of presentations: 1 Number of attendees: 600

Children's water festivals or other events:

Number of presentations: 1 Number of attendees: 500

Cooperative efforts with existing science/water education programs (various workshops, science fair awards or judging) and follow-up:

Number of presentations: 5 Number of attendees: 363

Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):

Description: None

Number distributed: 0

Staffing children's booths at events & festivals:

Number of booths: 1 Number of attendees: 500

Water conservation contests such as poster and photo:

Description: • SJWD - Wholesale sponsors a Poster contest for its retail agencies. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an assortment of gift certificates from local businesses. The teacher of each student who placed in the contest receives $100 for classroom supplies.

Number distributed: 313

Offer monetary awards/funding or scholarships to students:

Number Offered: 0 Total Funding:

Teacher training workshops:

Number of presentations: 0 Number of attendees:

Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens, etc.:

Number of tours or field trips: 2 Number of participants: 306

College internships in water conservation offered:

Number of internships: 0 Total funding:

Career fairs/workshops:

Number of presentations: 0 Number of attendees:

Additional program(s) supported by agency but not mentioned above:

Description: • The Water Bucks Program was developed as an opportunity to educate students on the efficient use of water. In exchange for student participation in identifying and reporting leaks and other signs of water waste, the District rebates the amount of the school's water bill (that is paid by the school district) directly back to the school. To date, the District has given back a total of more than $300,000 to the elementary schools in our service area.

Number of events (if applicable): Number of participants: 240

Total reporting period budget expenditures for school education programs (include all agency costs): 46500

Comments

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

Link to FAQs

2009

BMP 2.1 Public Outreach Cont'd

View MOU

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question related to your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Expense Category	Expense Amount	Personnel Costs Included?	
Regional Water Efficiency Program	$8,420	✔	If yes, check the check box.
Regional Water Efficiency Program	$164,308	✔	
SJWD - Retail	$62,886		

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of how your agency views their importance / effectiveness with respect to conserving water, with the most important/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? ○ Yes ○ No

Public Outreach Additional Information

Public Information Programs	Importance	
The Regional Water Efficiency Program designed and implemented a Community-Ba	$1	

Social Marketing Programs

Branding

Does your agency have a water conservation "brand," "theme" or mascot? ○ Yes ○ No

Describe the brand, theme or mascot.

The Regional Water Efficiency Program uses one overall brand image ("Be Water Smart") and a separate image for the current outdoor water efficiency campaign ("Blue Thumb")

Market Research

Have you sponsored or participated in market research to refine your message? ○ Yes ○ No

Market Research Topic	The Regional Water Efficiency Program conducted a statistically valid telephone survey of 600 customers about water efficiency knowledge, attitudes and behaviors; also written/online surveys of participants in the Community-Based Social Marketing (CBSM) program Blue Thumb Neighbors
Brand Message	"Be Water Smart:" use water wisely/"Blue Thumb:" use water efficiently outdoors
Brand Mission Statement	The "Be Water Smart" and "Blue Thumb" brands both encourage residents to use water efficiently at home. "Blue Thumb" focuses on water efficiency in the landscape where most water use--and water waste--occurs

Community Committees

Do you have a community conservation committee? ○ Yes ◉ No

Enter the names of the community committees: Regional Water Efficiency Public Outreach Subcommittee

Training

Training Type	# of Trainings	# of Attendees	Description of Other
Green Gardener Traini	$4	$122	The Green Gardener Training Program educates local garde

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description
Regional Water Efficien	19920	Designed and implemented a Community-Based Social Marketing (CBSM

Partnering Programs - Partners

Name	Type of Program
☐ CLCA?	
☐ Green Building Programs?	
☐ Master Gardeners?	Maintain a Master Gardener on staff to assist customers with landscaping questions.
☐ Cooperative Extension?	Regional Water Authority provides funding for the Sacramento Cooperative Extension.
☐ Local Colleges?	
☐ Other	

☐ Retail and wholesale outlet; name(s) and type(s) of programs:

Partnering Programs - Newsletters

Number of newsletters per year

Number of customers per year

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities

The Regional Water Efficiency Program partnered with the Sacramento Municipal Utility District to publish an article in SMUD's newsletter "Connections" on the water-energy use connection. This partnership also included a joint Public Service Announcement on the water-

Conservation Gardens

Describe water conservation gardens at your agency or other high traffic areas or new

Recently expanded, this WEL Garden features an inviting entry area, varieties of flowers, groundcovers, gazebos, parking lot landscaping, fire-resistant and deer-resistant plants and an oak tree-compatible and preservation garden that contains native plants and ground cover

Landscape contests or awards

Describe water wise landscape contest or awards program conducted by your agency

Comments:

Presentation Prepared for the Regional Water Authority

Marketing Campaign for 2009-10

Linda Higgins
Regional Water Authority

Maryanne Ciaraglia
Account Executive | Radio Disney | 916-780-1486
maryanne.ciaraglia@disney.com
Part of the Magic of the Walt Disney Company

Campaign Objectives

•Continue to keep RWA's educational messages in front of our families during Winter 2009 and Spring/Summer 2010 in an effective, affordable campaign.

•Take RWA out into the community with us thru our Radio Disney Family Bags and prizes for our event, if available.

•Radio Disney RWA Kidcasters

•RWA @ 6th Annual Rockin Walk at Arden Fair Mall.

•RWA Public Affairs Show

The Radio Disney Difference

•Radio Disney is a kid and parent-friendly music destination that helps build meaningful, relevant pop culture and Disney connections.

•Radio Disney gives kids access to their favorite music and artist, exclusive behind-the-scenes content, and amazing promotions.

•Radio Disney is aspirational, assessable, inclusive, playful, relevant, current and cool.

Regional Water Authority Giveaways

RWA

Radio Disney AM 1470 SACRAMENTO

The RWA Frisbee's and Rulers were a great prize for kids. They were a great way for us to extend your name with the community.

RWA Kidcaster Winners

2009 Winner
Anthony

2009 Winner
Mailo

Over 200 kids auditioned for the Radio Disney RWA Kidcaster promotion.

Fall 2009 Schedule

Campaign Water with the Weather!

		Mon	Tue	Wed	Thur	Fr	Sa	Su
On-air Weekly	6-10a	1		1	1	1		
Schedule	10a-3p		1	1		1	1	1
:60 Commercials	3-8p	1	1		1		1	1
PSA Schedule	6-10a		1					
:30 Commercials	10a-3p	1			1		1	1
	3-8p			1		1		

Weekly Schedule - :60 to air the weeks of 11/23, 11/30, 12/7, 12/14 = 56x

PSA Schedule - :30 to air weeks of 12/21, 12/28, 1/4, 1/11 = 28x

Spring 2010 Schedule

Be Water Smart!

		Mon	Tue	Wed	Thur	Fr	Sa	Su
On-air Weekly	6-10a	1		1	1	1		
Schedule	10a-3p		1	1		1	1	1
:60 Commercials	3-8p	1	1		1		1	1
PSA Schedule	6-10a		1					
:30 Commercials	10a-3p	1			1		1	1
	3-8p			1		1		

Weekly Schedule - :60 to air the weeks of 4/26, 5/3, 5/10, 5/17 = 56x

PSA Schedule - :30 to air weeks of 5/24, 5/31, 6/7, 6/14 = 28x

Complimentary production of new commercials are always included.

Radio Disney Production

Dedicated creative team of
Disney ImaginEARs …
Will custom create your commercials

Radio Disney's production staff uses top talent from across the country to help make your commercial sound unique while appealing to our core demographics. Our talented staff from Dallas and Boston can custom create a commercial just for you. Voice range from young kids to grandparents. All Disney talent is first class and ready to work for you!

Disney production can also take your general market commercial and "DisneyfY" the spot to fit our audience at no extra cost.

Radio Disney Family Bags

The Radio Disney Signature Family Bags are a premiere item at Radio Disney AM 1470 events. They are filled with super cool things, from stickers to trading cards to discounts to fun activities. It is a great way to get RWA's information into the hands of our parents….and your activity sheet into the hands of kids. You provide the flyers… and we will include them in our signature family bags.

Radio Disney Kidcaster

It is a fun, interactive way to get your messages into the hands of kids and families together…..The Radio Disney RWA Kidcaster try out to be a RWA Kidcaster for Radio Disney AM 1470. The power of a kids reciting your Public Service Announcements (:15) over the microphone at Radio Disney events is very exciting!

Here is the scoop……

•Kids, with their parents, read over a set of :15 PSA announcements about watering with the weather, water conservation, and tips for the family….whatever RWA wants, but must be family friendly. After reviewing the messages, the kids choose which message they want to read "out loud" for their "try-out".

•They practice and learn the PSA message, usually with their parents there to help.

•Then they take the microphone and read the PSA out loud at our booth for everyone around them can hear the message.

•We will select the 2 best kids to come into the studio and record a PSA message for RWA, produce them and then air them in key months.

•Venues to be agreed upon before execution.

Radio Disney AM 1470 will air (40x) – (:15) PSA's RWA Kidcaster

Mon-Sun 6a – 8p

Radio Disney Event

Rockin' Walk!

Regional Water Authority can join us once again at the 6th Annual Rockin Walk at Arden Fair Mall. In early August 2010.

RWA will get a booth and be part of our campaign. The event centers around health and fitness. So along with your general message of conservation etc, a health component needs to be part of the booth.

RWA

Radio Disney AM 1470 Sacramento

ARDEN FAIR

Public Affairs Show

Radio Disney KIID – Kid connection

RWA can continue being a guest and discuss important topics of the season on our Public Affairs show. Radio Disney KIID Kid Connection.

Radio Disney AM 1470 is the affiliate of the Radio Disney national family radio network, dedicated to programming high-quality, wholesome, interactive entertainment that is beneficial to children, families, and the communities in which we serve.

Radio Disney's KIID Connection show is a weekly public affairs show run Sunday mornings from 6:30-7am on Radio Disney AM 1470. The show focuses on the local topics most important to families today.

Campaign includes 2 appearances to compliment each campaign to discuss the topics that are important to the community and RWA at that time.

Campaign Recap

The Fall 2009 Campaign (Nov 2009 – Jan 2010)

- 2 month on-air campaign Nov 08-Jan 09
- Total 84x- :60/:30 commercials
- Distribution of materials in our Radio Disney Family Bags during on-air months.
- Public Affairs show
- Complete production of commercials

The Spring/Summer 2010 Campaign (May 2010 – Sept 2010)

- 2 month on-air campaign May 08-June 09
- Total 84x -:60/:30 commercials
- Distribution of materials in our Radio Disney Family Bags during on-air months.
- Complete production of commercials
- Rockin Walk event (Aug)
- Kidcaster Campaign in the Community 40X –Kidcaster PSA commercials (State Fair)
- Public Affairs show

Campaign Investment = $5900

2009	2010
Nov $1200	May $1200
Dec $1200	June $1200
	July $1100

Accepted by:
Linda Higgins
Regional Water Authority_____

Maryanne Ciaraglia,
Radio Disney_____

Date: _____

Please Fax back to 916-780-1493

Thank You!

Thank you for letting Radio Disney AM 1470 be part of RWA's marketing outreach campaign. We look forward to being a partner again.

RWA

Radio Disney AM 1470 TEAM GREEN

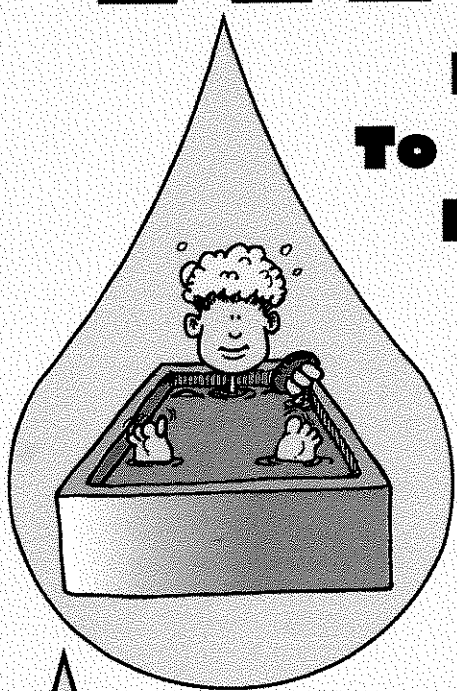
WATER

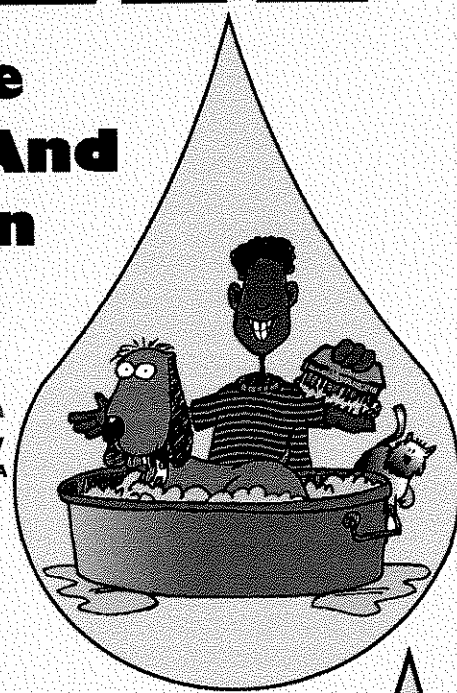
From Here To Eternity And Back Again

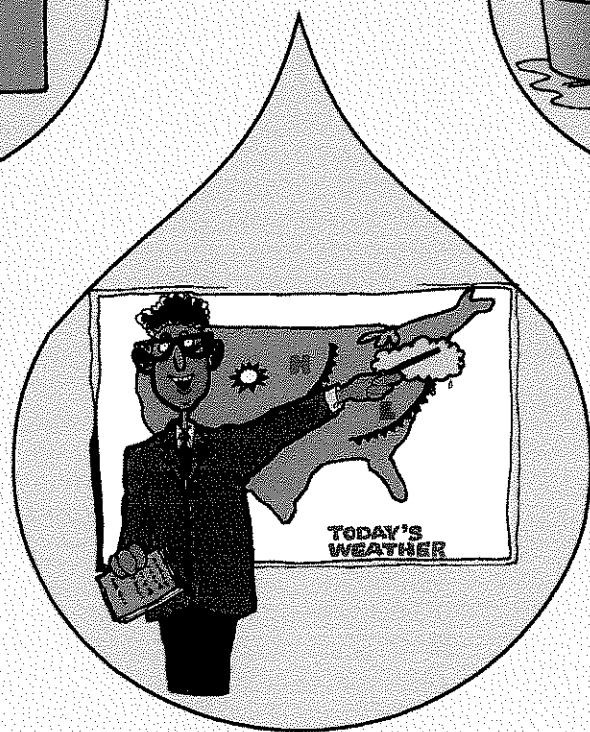
RWA

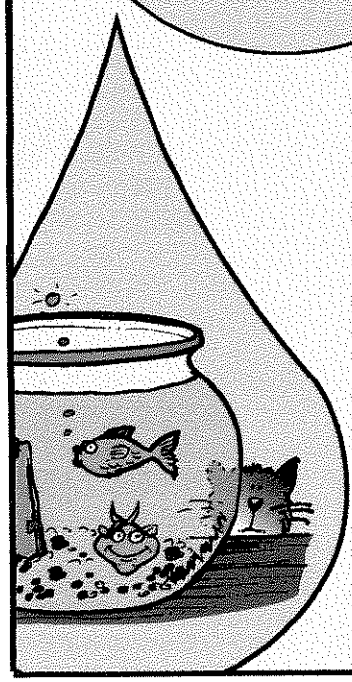
Regional Water Authority

BUILDING ALLIANCES IN NORTHERN CALIFORNIA









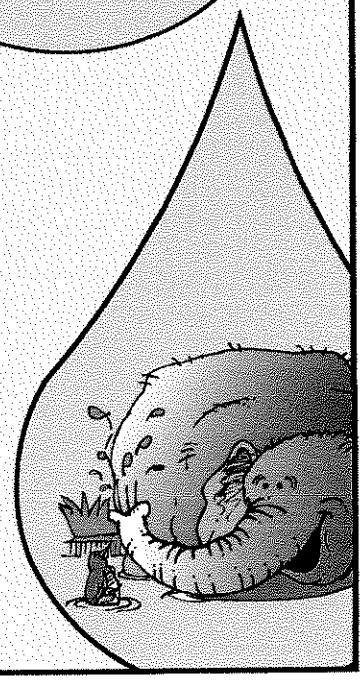


Table of Contents

Discussion questions:

1. When you fill in the quote from Ben Franklin, read it aloud as a class. Discuss what you think Ben meant.
2. Ben might simply have been saying something important about water. But he might have meant the saying to be about much more than water. Have you ever really missed something because you took it for granted and were not very careful with it?
3. Can you find a news story in today's newspaper that Ben Franklin might have used this quote for — a story that might not even have anything to do with water?
4. Look up "metaphor" in a classroom dictionary. Can this quote be a metaphor?

Dive Into Water

Every single living thing on planet Earth, from the smallest amoeba to the largest blue whale, depends directly upon water for its survival.

And so do we.

Think of all the different ways we humans use water every day: for drinking, for cooking, for bathing. Imagine what your life would be like if one day you turned on a faucet in your home — and nothing flowed out.

That's already happening in some parts of the world today. In Sudan and Somalia, two countries in eastern Africa, people don't have enough food to eat, largely because there has been too little rain to grow crops. In the Middle East, the Jordan River forms the border between Israel and Jordan — two countries that, together, will soon want to take more water from the river than flows through it. Many people are worried that peace in the Middle East is endangered by the coming fights over water.

There are problems with the drinking water supply in many parts of America, too, from Camden, New Jersey to Phoenix, Arizona. California endured a brutal drought from 1987 to 1993, when laws were passed making it illegal to fill a swimming pool or water a lawn during the day. The level of water in Florida's wells is falling as a growing population demands more and more water.

Clearly, we need to think about conserving water so that all people have enough. But we also need to think about how we can better share our fresh water with the trout, bears, bats, trees, wildflowers and other living things that need water to survive.

In the pages ahead, you'll dive into an ocean of water activities. You'll learn about the different ways you use water every day, you'll find out what brings water into your faucet, and you'll discover what happens to water when it leaves your house through your sink's drain.

So come on in, the water's fine. Start with the "Take a Guess" quiz on the next page, and follow your teacher's instructions.

Ben's Mystery Quote

Ben Franklin, a writer of the Declaration of Independence, a pioneer in the science of electricity, and the founder of a Philadelphia newspaper, had some wise thoughts on many things, including water.

Below are a series of blanks. Your mission is to fill in the blanks using numbered letters that appear throughout these pages. Find a clue, answer the question, and use the numbered letters to fill in the blanks below. When you're done, you can read Ben's most famous statement about water.

" _1_ _2_ _3_ _4_ _5_ H _6_ _7_

_8_ _9_ _10_ _11_, _12_ _13_ _14_ _15_,

_16_ _17_ _18_ _19_ _20_ _21_ _22_ _23_ _24_

_25_ _26_ _27_ _28_ _29_ _30_ _31_ _32_

_33_ _34_ _35_ _36_ _37_ _38_ _39_."

Take A Guess

Before you begin learning about the world's water, try taking this quiz. Read each question, and circle what you think the correct answer is. And don't worry — you are not expected to know the answers.

1.
Most of the Earth's fresh water is contained in which of these places?

a. the ocean

b. the atmosphere

c. deep underground

d. the polar ice caps

2.
In your home, which of the following uses the most water?

a. the kitchen faucet

b. the ice maker

c. the toilet

d. the bathtub/shower

3.
When Tyrannosaurus rex lived millions of years ago, how much water was available on Earth?

a. Much more than today

b. The same amount as today

c. Much less than today

4.
Which of the following is the source of water for your school's water fountain?

a. a reservoir

b. a river

c. a well

d. I don't know

5.
Water is used to make which of the following items?

a. hamburgers

b. tomatoes

c. cars

d. aluminum cans

e. computers

f. all of these

6.
If you were to drill straight down into the rock beneath your feet — right where you now sit! — you would eventually find water.

a. that's just crazy and not true

b. that's true depending on where you live in the U.S.

c. that's absolutely true for anywhere you live

7.
Many major American cities, from Boston to Sacramento, are built on the banks of rivers. That's because the rivers have provided us with which of the following:

a. a source of food

b. a source of drinking water

c. a method of transporting goods and supplies

d. a source of hydro-electric energy

e. a source of water for factories and mills

f. all of the above

You'll learn the right answers to each of these questions in the pages ahead. When you've finished this supplement, take the test again. Do any of your answers change?

The World's Water

Read the following true account of water. Fill in the blanks using the words provided in the box on this page. One word will not be needed. That word can be used to answer Clue #1!

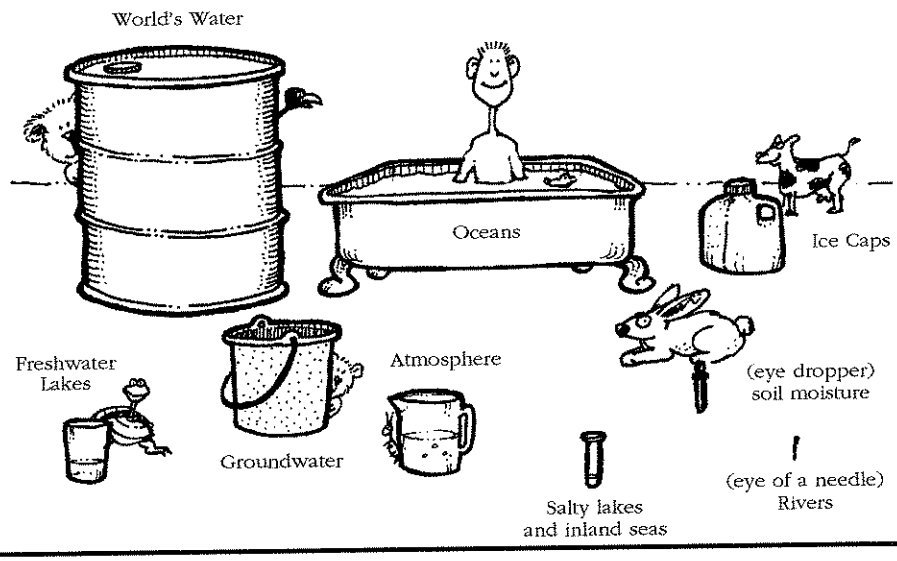
Imagine if you were to measure all the water everywhere on planet Earth: in the oceans, in rivers, lakes and streams, in swamps and _____, in the atmosphere, underground, and even in the ice caps at the north and south _____. If you did, you would discover that the Earth's water supply was a whopping 400 billion billion gallons (that's a 4 followed by 20 zeroes). Sounds like a lot, doesn't it?

But nearly all of the Earth's water — a full 97% of it — is salt water stored in the _____. So only 3% of the world's water is _____ — and two-thirds of all fresh water is locked away as _____ in the Arctic Ocean and on the continent of _____.

That leaves a tiny 1% of the world's water available as drinking water. But much of that is water vapor stored in the sky as humidity or contained in _____. And another chunk of the world's water is too deep underground for _____ to reach.

Then we come to lakes and rivers. Consider the importance of rivers to humankind. Most early civilizations grew up on the banks of rivers. Our ancestors used rivers as _____ for transportation, as a source of clean _____ water, as a source of fish for _____, and even as a place to build dams for _____. Yet only 0.0001% of the Earth's water supply flows in rivers! And only 0.009% is in lakes.

The illustration below shows how the world's water supply would be portioned out if all the water were placed in a 55 gallon drum. How much water flows through rivers. Are you surprised?



Clue #1

Though this tree often seems to be "weeping," it's happiest when it's growing in lowlands with its roots close to the banks of rivers, streams, and creeks.

___	___	___	___	___	___	___
16		10	19		35	

ocean
clouds
wells
highways
willow
Antarctica
food
power
fresh
ice
wetlands
poles
drinking

The Water Cycle

It Just Keeps Going and Going...

Right now, rivers like the Mississippi and Sacramento are dumping billions of gallons of fresh water into the ocean. Yet oceans never fill up, rivers always have new water to bring to the ocean, and your faucet never runs out.

How is this possible? The Earth's limited supply of 400 billion billion gallons constantly moves through the sky, sea and land in a process called the water cycle.

On this page is an illustration of the water cycle. Work in teams of two or three to compete the following activity.

1. Use classroom or library resources to write a definition for each of the words listed to the right.
2. Each numbered arrow in the water cycle illustration identifies one of the words you have defined. Write the correct number next to each of the words. Can you match every word to its proper arrow?

#___*Evaporation:*_____

#___*Condensation:*_____

#___*Precipitation:*_____

#___*Transpiration:*_____

#___*Percolation:*_____

#___*Runoff:*_____

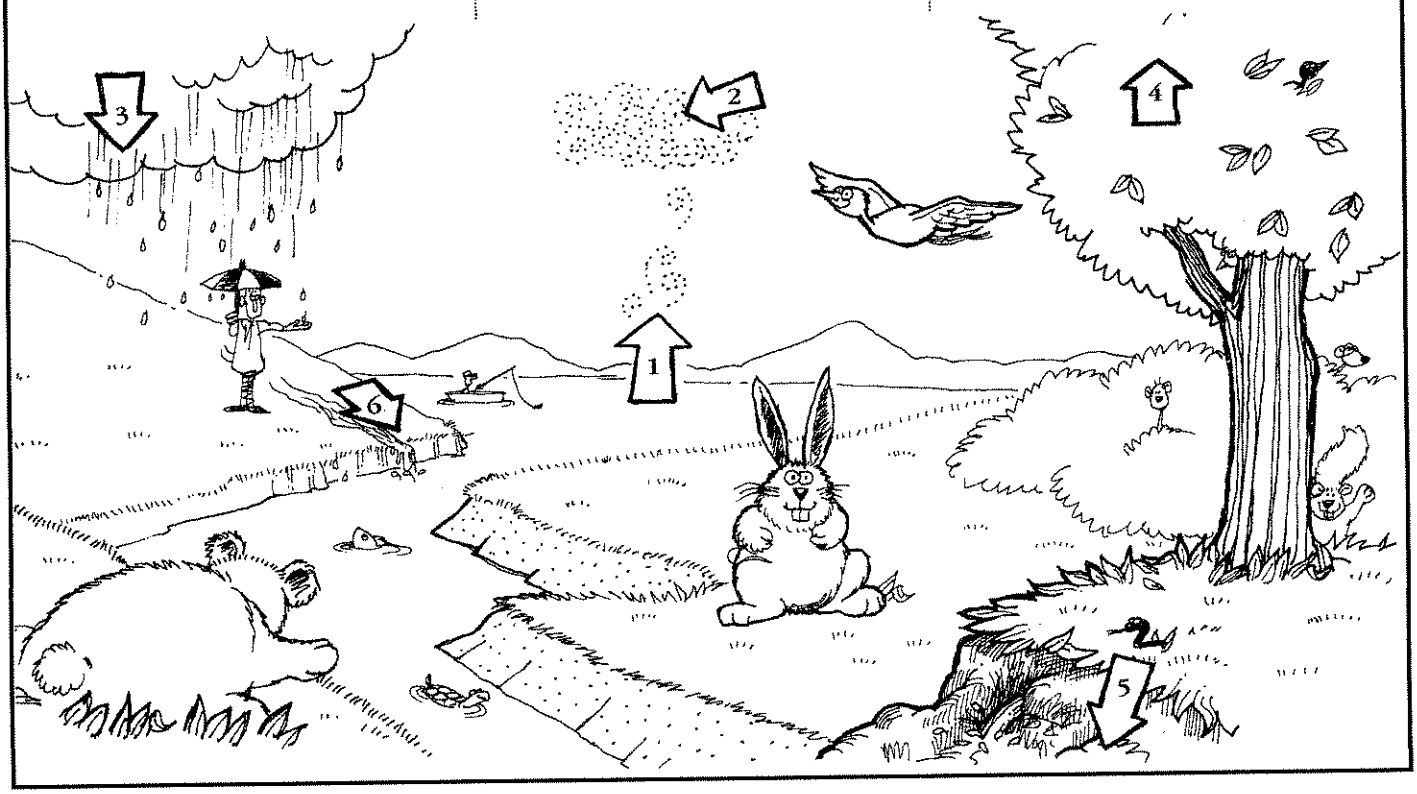
Clue #2

"Precipitation" is when water falls from clouds to the ground. Precipitation comes in several forms: rain, sleet, snow and this:

___ ___ ___ ___
26 11

Discussion questions:

1. Could that be the Pacific Ocean raining on your school? How? Where does rain come from?
2. Is your house part of the water cycle? Does water flow into your house? Where does it come from? Does water flow out? Where does it go?
3. Water needs energy to evaporate. What's the source of energy for evaporation? Does water still evaporate on cloudy days? What happens to the salt in the ocean when ocean water evaporates?

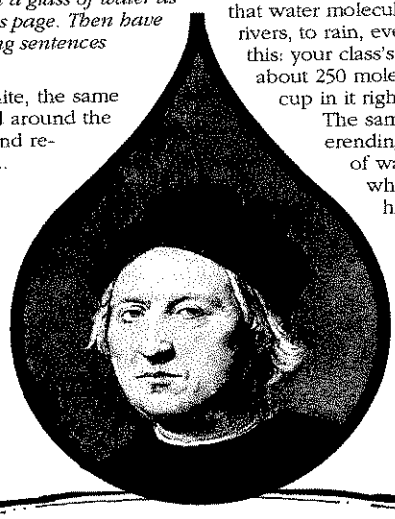


A Toast to Columbus!

(Note to the teacher: Get a glass of water as a prop before you start this page. Then have students take turns reading sentences aloud.)

The world's water is finite, the same water flowing around and around the water cycle, being used and re-used, cycled and recycled.

Imagine if Christopher Columbus, the famed explorer who sailed to American shores in 1492, had brought with him a glass of fresh water. Imagine if—halfway across the Atlantic Ocean— he toasted his adventures, and poured that water overboard into the sea.



Where would that water have gone? Some of it settled into the sea. Some of it evaporated into the air. Some of it was taken into seaweed, and then eaten by a crab, which was eaten by an octopus.

A scientist recently figured out that if the water cycle was able to evenly distribute all of Columbus's water around the world, so that water molecules went to the ice caps, to rivers, to rain, everywhere, then imagine this: your class's glass of water will have about 250 molecules from Columbus's cup in it right now!

The same water flows as a "neverending story." Here's our glass of water, and a special list of where some of the molecules have been during the last 4 ½ billion years. Where else do you think these molecules have travelled? Write your own list on the lines at right.

All the water inside has been in many places. One part erupted out of a volcano. Another was water drunk by a Tyrannosaurus rex. Some of this water was a skunk's spray 100 years ago. A penguin paddled through one part. Another part was a saber-toothed tiger's blood. Part is some caveman sweat. Another part was a downpour in a rain forest. One part was flowing in a nearby stream only 10 days ago.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Clue #3

The City of Pittsburgh is built where the Allegheny and Monongahela Rivers meet to form this major American river.

The $\frac{\_\_}{23}$ $\frac{\_\_}{32}$ $\frac{1}{\_\_}$ $\frac{\_\_}{33}$ River

The Neverending Story

Since water's travels truly are a "neverending story," here's your assignment. Write a story that begins, "Once upon a rainstorm, a drop of water fell from the sky." Use that as your first sentence, and continue the story. Can you get your drop of water into at least six different places or things? End your story with this line: "And the drop of water was part of a rainstorm again." How can you get your drop back into the clouds?

(Note to the teacher: This is an especially good activity for a rainy day.)

The Big Question

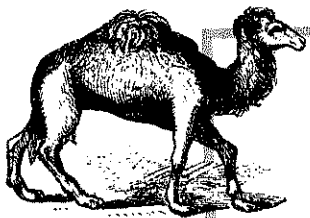
Wait a minute! If the Earth's water supply has always been 400 billion billion gallons, then the Earth's water supply will always be 400 billion billion gallons. And since we use the same water over and over again, we don't have to bother saving it. Or do we?

Discuss this as a class. If the Earth's water supply flows through the water cycle endlessly, why might we still have to consider saving it?

We'll come back to this "Big Question" later.

Life Requires Water

You know that people depend on clean water for many things.
But remember: We're not the only living things that need water.
All life on Earth, from a single-celled amoeba to the giant blue whale, needs water.



1. camel

Can you match each living thing with its need for water?
Draw a line from the drawing of the creature to the proper description.

a. drinks from puddles and uses mud from puddles to hold its nest together

b. needs clean, cold fast-moving streams that attract insects it likes to eat

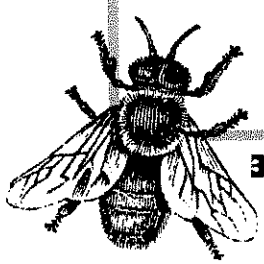
c. flies low over ponds at night, licking water as it flies

d. drinks from puddles, but also drinks water stored as nectar in flowers

e. for long trips through the desert, needs to drink lots of water that will be stored in its stomach

f. can live only in the salty water of oceans

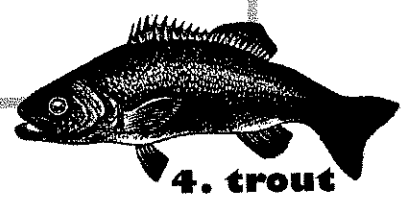
2. robin



3. honeybee

6. shark

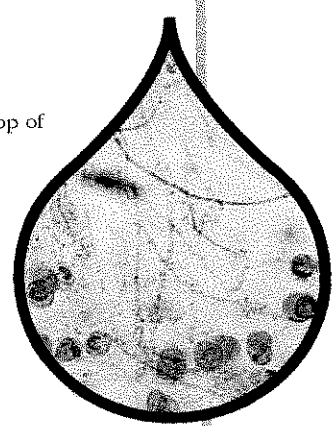
5. bat



4. trout

Just One Drop

Here's a photograph of a drop of stream water placed under a microscope. Do you see any living things? These are single-celled animals called protozoans. In nature, water is alive, filled with millions of these creatures. Would you like it if the water flowing out of your home faucet looked like this?



For more information about water online visit:

http://ga.water.usgs.gov/edu/

Photo: The Free Library of Philadelphia

Make A Water Mural

Here are five habitats made up of mostly water:

pond ***stream***
wetland ***shoreline***
open ocean

Divide your class into five groups. Each group is assigned one of these habitats, and each is challenged to create a large mural representing that habitat.

Can each group discover at least 10 species that live in their habitat? Hang your murals in the school's hallway. Give an example of habitats where you live.

The Flow From My Faucet

Water Detectives

Divide your class into teams of several students each. Each team is assigned one of the following water problems. Can your teams be detectives and figure out how to find the missing information?

1. What is the exact source of your community's drinking water?
2. What is the source of your school's drinking water?
3. Drinking water must be tested for many chemical impurities and the presence of disease-causing microbes before it's sent to your home. Can you discover *three* things your drinking water is tested for?
4. Does your water company add fluoride to the water? If yes, why? If no, why not?
5. What is the address of the treatment plant that provides water to your homes? Does it give tours to school groups?
6. How many gallons of water does your local treatment plant clean every day?

Think of all the water you've already used today. You've probably turned on a kitchen faucet for a drink of water or to make some oatmeal. You might have brushed your teeth using your bathroom's faucet. You might have taken a bath or a shower. In school, perhaps you've already drunk from a water fountain or flushed a toilet or urinal.

So much water. Do you know where this water comes from? Do you know what's done to the water to prepare for you to drink it?

All your drinking water must come from somewhere, and it's likely to be one of these sources: a river, a lake or reservoir, or an underground well. That's it. Philadelphia residents drink the Delaware River. Florida's people mostly drink wells. Milwaukee's citizens drink Lake Michigan, while Sacramento relies on the American River, Sacramento River and groundwater. All water comes from somewhere.

And it must be cleaned before it's sent to your home. Rivers and lakes are living systems, creeping and crawling with insects, fish, crustaceans, worms, bacteria, single-celled animals— and a lot more. Rivers and lakes can also be polluted with many different chemicals from factories, and rainwater flowing off roads and highways brings gasoline and motor oil dripping into water as well.

So your home and school's water is treated before it comes to your faucet. Here's a diagram of a typical water treatment plant. Follow the seven steps to clean water.

1. ***Nature and the screen.*** Water sitting in a reservoir is partially collected through the actions of nature. Sunlight and air take care of some pollutants, and heavy sediments sink to the bottom. Water is pumped in through a screen, which keeps fish, insects, sticks, and stones out of your water.
2. ***The first chemicals.*** The water is treated with a series of chemicals. Chlorine kills bacteria and living things. Alum causes chemicals to form large sticky clumps that trap pollutants. Lime assists alum. Powdered carbon (like in aquarium pumps) traps more chemical pollutants, and ammonia, if added, works with chlorine to remove bad tastes and odors.
3. ***Flash dance.*** The water is sent to a flash mixer, where vigorous mixing action allows water to interact with all the chemicals added.
4. ***Mixing.*** In the flocculator, slower mixing lets the alum and lime added earlier form solid, gooey clumps of chemicals called "floc."
5. ***Settle down.*** Floc settles out and is removed for special treatment and disposal.
6. ***Filter city.*** The water slowly filters through two feet of coal, sand, and gravel in huge concrete boxes. Chlorine is again added to prevent bacteria from building up in underground pipes after treatment. A corrosion inhibitor is also added to prevent pipes from rusting.
7. ***To your home.*** Large pumps force the water through transmission lines underneath streets and to your house.

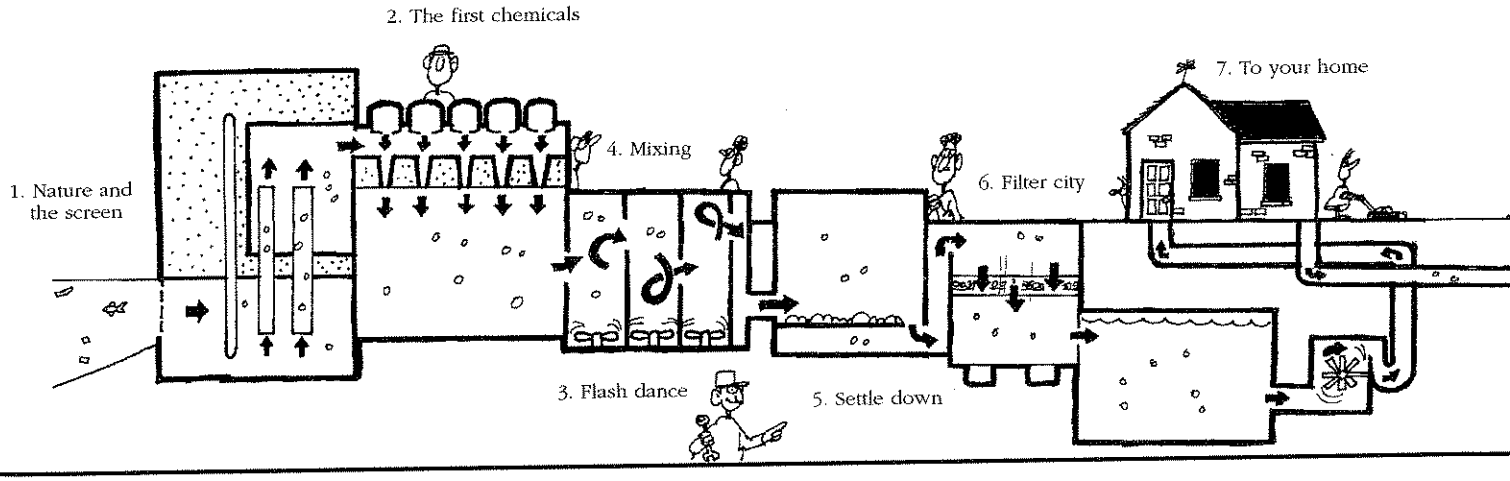
The water school is act cleaned befc described or leaves your

Most of th not used up. flows down The water y body, then e your house. most likely f *sewage treat*

For some houses goes their back y library resou work). But, treatment pl

Here's hov steps

Water Treatment



Down the Drain

The water flowing into your house and school is actually treated *twice*. First, it's cleaned before it arrives in your home, as described on page 8. Then, it's cleaned *after* it leaves your home.

Most of the water flowing into your house is not used up. Your bath and shower water flows down the drain and out of your house. The water you drink is stored inside your body, then excreted, flushed down and out of your house. All the water leaving your house most likely flows to yet another facility, the *sewage treatment plant*.

For some people, waste water leaving their houses goes into storage bins underground in their back yards called *septic tanks*. (Use your library resources to research how septic tanks work). But, most Americans enjoy sewage treatment plants.

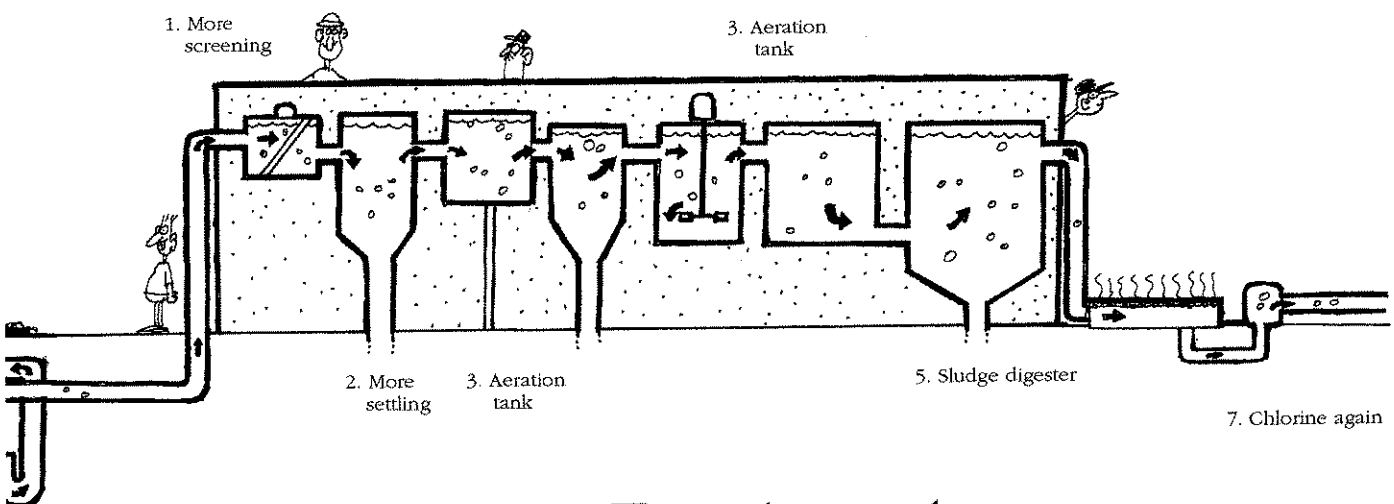
Here's how that works. Again, follow the steps

1. ***More screening.*** Screens trap large materials for easy removal.
2. ***More settling.*** Water flows first through a grit chamber and then into a sedimentation tank. More large particles fall out from the water for removal.
3. ***Aeration tank.*** Bacteria are added to the water to eat the raw sewage that leaves your home. Oxygen is added to the water to allow the bacteria to thrive.
4. ***Even more settling.*** Another tank provides a calm place for more impurities to settle out of the water.
5. ***Sludge digester.*** Another group of bacteria—a kind that hates oxygen— attacks the leftover sewage at this point, continuing to break it down into harmless by products. Sewage stays in the digester for a full 15 days, and the result is a product that looks very much like soil.
6. ***Sludge-drying.*** After the digester, the sludge lies in a drying bed, where water evaporates out. The end result is often incinerated, sometimes landfilled, and sometimes used as fertilizer. Not long ago, dried sludge was even dumped into the ocean. That practice is now illegal.
7. ***Chlorine again.*** Chlorine is added to the treated water to kill the bacteria used to eat the sludge. Then the water is sent *back* to a river, stream, or lake.

Drain Detectives

Again in small groups, solve these mysteries.

1. There are three kinds of sewage treatment: primary, secondary and tertiary. Use your school library to draw large posters of these three systems. Which of the three does the illustration on this page represent?
2. Call your water company. Which treatment does your community's sewage get: primary, secondary, and tertiary? What's the address of your community's sewage treatment plant?
3. After your community's sewage is removed and dried, what happens to it? Is it incinerated, buried in a landfill, or used as fertilizer for farms? Why did your community choose the option it did?
4. Where is the treated water sent to: which river, which stream, which lake? After it's cleaned, where does it go?



Sewage Treatment

Me and My Water

On the lines below, write a list of different ways you use water. There are 12 blanks; can you fill in each one with a different use? We got you started by completing number 1.

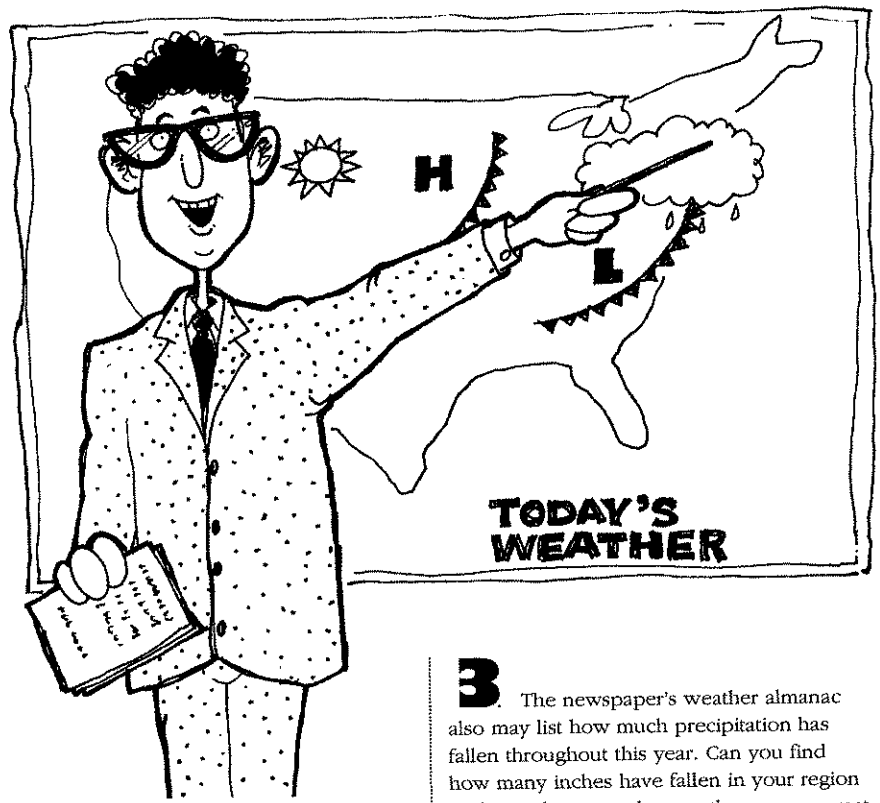
1. making ice for soda
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

Share your list of uses aloud as a class. Can your class fill the classroom's chalkboard with every different use of water you all thought up?

Now examine your list above. Are some uses more important than others? Read your list again. Circle *the three most important* uses of water. Share your thoughts as a class as to the most important uses of water. Can your classroom as a group decide which three uses on the chalkboard are the most important?

Now draw a single line through the three uses you would consider *the least important.* Imagine if one day you were told to use less water. Could you conserve water by dropping three of these uses? Which would be the easiest to drop? Discuss your choices aloud as a class.

Water In The News



1. Look through today's newspaper. Are any of the stories about water? Read one and summarize it.

2. Find the weather report in today's newspaper. Is any rain forecasted to fall anywhere in the United States? Where will the most rain fall today?

Clue #4

The average American household uses 243 gallons of water every day. But that number can increase by 50 or even 100 gallons per day if a sink, shower or tub faucet has one of these:

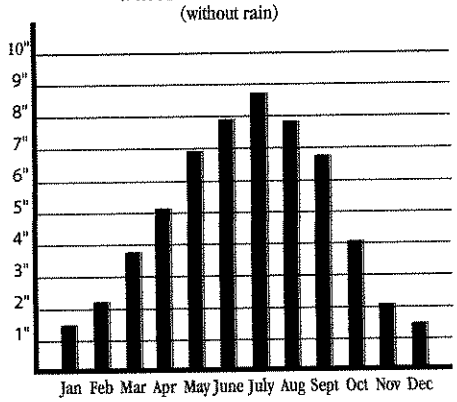
__ __ __ K

27 18

3. The newspaper's weather almanac also may list how much precipitation has fallen throughout this year. Can you find how many inches have fallen in your region so far? Is that more, less, or the same amount of water as usually falls by this date?

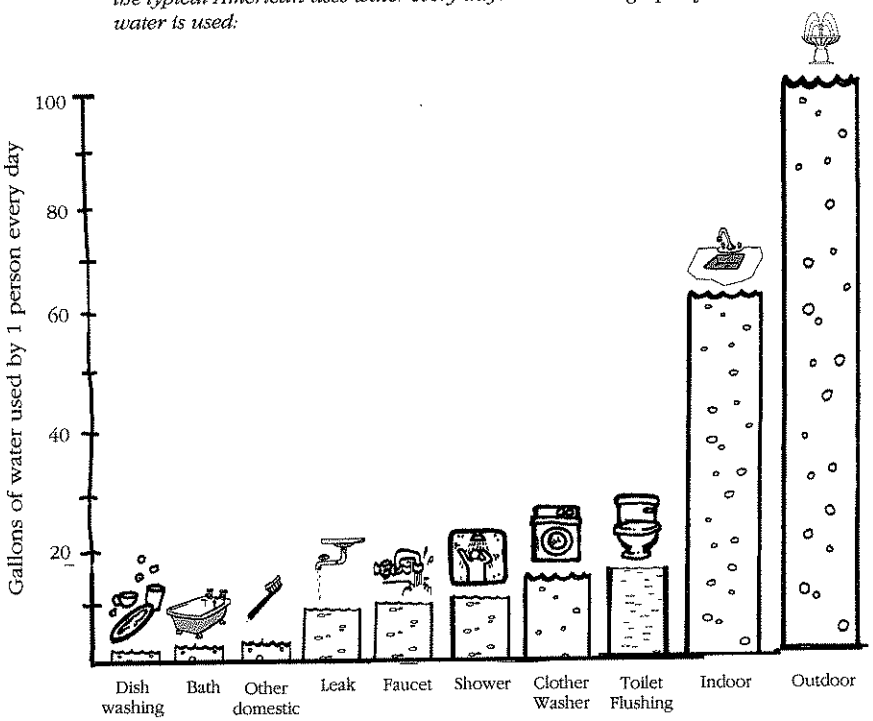
4. Look on the graph to find how much more water grass needs in July than in October.

Water Needs of Grass
(without rain)



My House's Water

The Environmental Protection Agency is the US government's protector of environmental resources like water and air. The EPA estimates how the typical American uses water every day. Here's a bar graph of how that water is used:



Use the bar graph above to fill in the correct answers to the following questions:

1. Which use of water consumes the largest amount? _____

2. Which one uses the least water?

   _____

3. How much water does doing the laundry use?

   _____

4. How much water does showering and bathing use?

   _____

5. If the family's house has a garden or lawn, it could use 100 more gallons of water per day during the summer. The amount of water used on the garden or lawn would equal the amount used for:

Clue #5

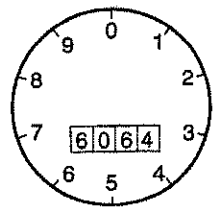
Ocean water is the home of the largest mammal of all time. This endangered giant depends on clean water to grow its food, the shrimp-like creature called krill that it eats by the millions.

___	___	A	___	___
28	2		20	17

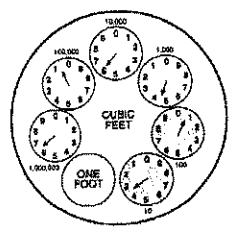
Water Math

How Do You Read a Water Meter?
If you want to track your water use more often than monthly, you can read your own meter. It may seem a little complicated, but you'll be able to do it.

Straight-Reading Meter: The straight-reading meter reads exactly like a mileage indicator on your car.



Round-Reading Meter: The round-reading meter has several small dials in a circle. Each reads like a clock, except that the hand on every other dial turns counter clockwise. To read this type of meter, just start at the right and write down the reading of each dial from right to left. (When any hand is between the numbers, always use the lower number). The "ONE FOOT" dial is the test dial to show that your meter is working.



To determine water use over time
Take two meter readings and subtract the last reading from the current reading.
To convert cubic feet into gallons
There are 748 gallons per 100 cubic feet of water. Multiply ccf by 748 to get the number of gallons used.

If your family used 150 cubic feet of water in a month, how many gallons is that? _____

Can you make up some other word problems that convert cubic feet into gallons?

The Big Picture

On page 11, you learned that the average American family of four uses 243 gallons of water per day. That's not the full story. You actually use a lot more water, in ways you never see.

Drink a can of soda, for example. The soda's main ingredient is water. And the soda's sweetener, sugar, is grown using water provided by irrigation. Manufacturing the aluminum can requires water. The mining of ore that becomes aluminum needs water. And the truck that delivers the soda to your local store runs on gasoline that requires water for its manufacture, too.

All together, one can of soda represents the use of more than *10 gallons* of water.

Water is needed to make paper. Water is used to make steel. Your electricity is provided by power plants cooled by water. This newspaper came from a tree that grew using water, and is printed from inks that combine dyes and chemicals with water.

In your house, you use about 60 or so gallons every day. But in total, each American uses more than *2,000 gallons* of water each and every day.

In the space below, make a list of every single thing you will have or have had at lunch today in school. (If needed, send one student to the cafeteria to find out everything to be served today.) Put every single thing on the list!

Next to each item, write a*t least one way* that part of your lunch required water. Does *everything* you eat need water?

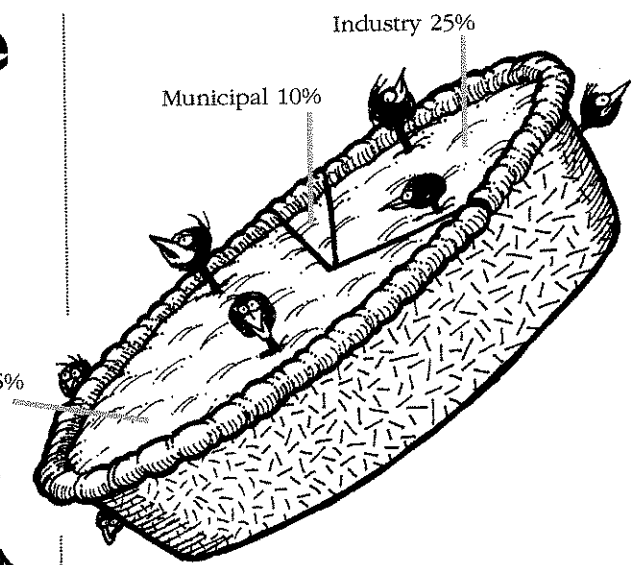
Lunch item	***How it needs water***
hot dog	beef comes from cows; cows drink water

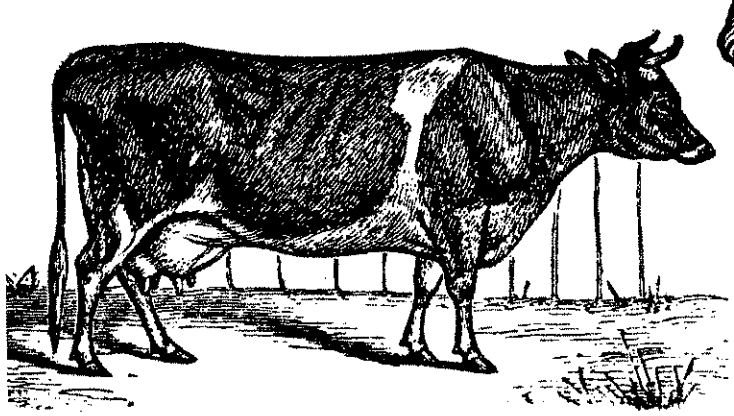
An American Pie

Look at the pie chart to the right. It shows daily water use in three parts of the U.S. economy. Have your teacher help you interpret the chart, and answer the following questions:

1. Which uses more water, farming or industry?

2. The water coming to your home and school falls under the category "municipal." Which other sectors of the economy uses more water than homes and schools?





3. Farming accounts for 65% of the water Americans consume. That's about two-thirds. Of your personal 2,000 gallons, about how many are accounted for by agriculture? *(Hint: start by dividing 2,000 gallons into thirds)*

4. The magazine Newsweek, in writing about cattle ranching, noted "the water that goes into a 1,000-pound cow would be enough to float a battleship." Can you figure out at least three ways a cow needs water? *(Think, what does a cow eat?)*

An Ocean of Problems

On page 6, we asked the "Big Question": If the same water is used endlessly, why bother conserving it? To answer that question, read the following story and fill in the blanks using words from the list on this page

The water we drink is ancient, as old as the _____ itself.

Every moment of every day, water is continuously moving through the water _____, endlessly evaporating, condensing, and _____. Yet that doesn't mean water will always be available to us. Though the entire Earth will always have 400 billion _____ gallons — in the oceans, in rivers, in the ice caps, in aquifers and in the atmosphere — the availability of water in any one location can always change. Take California, for example. For five years, that state experienced a _____, with very little rainfall, and Californians were asked to take strict _____ measures. Many New Jersey residents drink water from underground _____. What happens when water is pulled from wells faster than nature can _____ them? The wells run dry. The Colorado River is one of America's biggest, yet by the time this mighty river empties into the Gulf of California near _____, the river's flow has been reduced to a trickle, for its water is diverted to _____ crops, raising _____, and providing drinking water for cities built in _____.

Finally, _____ can make water undrinkable. Motor oil, gasoline, chemicals, fertilizers, pesticides, sewage from humans and farm animals, radioactive wastes — all of these can find their way into _____ water. Though the Earth's water supply remains constant, getting clean and cheap water to a growing worldwide _____ presents one of the next century's chief environmental concerns.

wells
pollution
drinking
Earth
recharge
cycle
precipitating
billion
irrigating
atmosphere
drought
conservation
cattle
Mexico
population
deserts

Clue #6

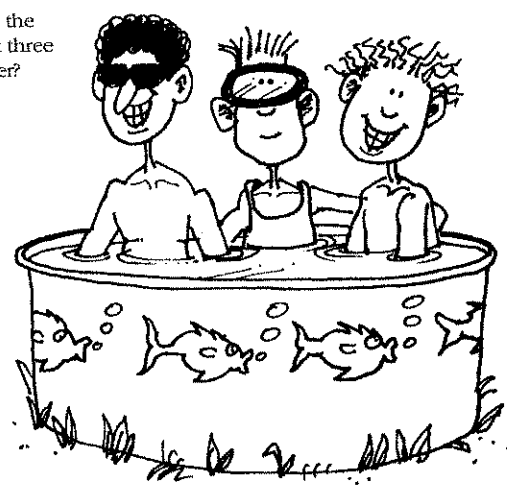
This favorite catch of sportfishers comes in several species— rainbow, brook, lake, brown. But all species share the need for pure, cold water. Its presence tells us the water is especially healthy.

___	___	___	U	___
31	30	29		37

Discussion questions:

1. This story provides several answers to the "Big Question." Can you name at least three reasons it's important to conserve water?
   _____
   _____
   _____

2. Many people drink water from wells. How does water get under ground? As water is pumped from wells, how does nature replace it? _____
   _____
   _____
   _____
   _____
   _____
   _____



Clue #7

Though this city sits at the mouth of the Hudson River, its residents drink the pure water of the Catskill Mountains, piped in from 100 miles away.

___	___	___		
22	3	1		
___		O	___	___
15			14	21
C	___	___	___	
		5		

Water, Water Everywhere

While water is everywhere— in the air around you now, under the ground beneath your feet— there are so many places around the world where lack of water is a severe problem. Read the four statements below. Each is followed by a question. On a separate sheet of paper, write a short essay that you feel answers the question for you.

1. Several countries, including Argentina, Chile, and the United States, have discussed the possibility of breaking off huge chunks of ice from the polar ice caps, and floating them to a port city for use as drinking water. Should people be allowed to "mine" the polar ice caps for water?

2. Many growing American cities — such as Phoenix, Arizona and Las Vegas, Nevada — are built in deserts, where there is little water. Water must be diverted from rivers to these cities. Should we build cities in deserts? Should the people who live in these cities be required to conserve water?

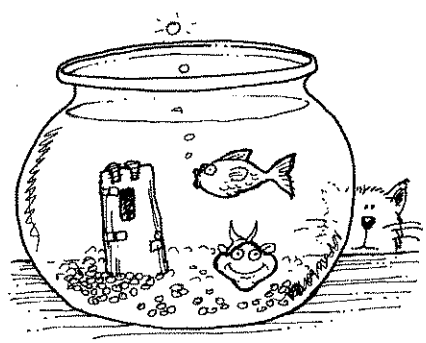
3. The Middle Eastern countries of Israel and Jordan share a common border, the Jordan River. Both countries withdraw their drinking water from that river. If water supplies dry up, will that help or hurt chances for peace in the Middle East?

4. More than one billion people live in places where they do not have access to clean drinking water. How can we help make sure all people get the water they need for survival?

Clue 8

This part of the tree is made mostly of water. And because water freezes in the winter, trees often lose these to protect themselves from winter's harsh climate.

		A	
9		34	



Clue 9

In this season, precipitation is likely to fall as snow or sleet.

	I		T		
24		4		7	39

Your Game Plan

What's the difference between conservation and efficiency? While we must use water every day, we should think carefully about how much we really need to use. Conservation reduces water use by changing our lifestyle habits. Water efficiency simply means using less water while still enjoying a precious resource. If you were asked to conserve water, which actions would you take first? Place a "1" next to that action. What would you do second? Rank that "2." If you were asked to use water efficiently, which actions would you take first? Place a "1" next to that action. What would you do second? Rank that number "2." Place numbers next to each of the actions, ranking them in order from those you would do right away, to those you would do last.

Clue #10

This habitat often borders rivers, oceans, and lakes. It provides homes for many different plants and animals: frogs, fish, turtles, alligators, ducks, muskrat, herons, and more.

___	___	___	L ___	___	N ___	___	___
8	38	25		36		13	12

Actions To Save Water

Everyday Water Efficiency Measures		Water Shortage Conservation Measures
____	Turn off water while brushing teeth.	____
____	Water the lawn or garden at night or early morning.	____
____	Fix leaky faucets, fixtures, and sprinklers.	____
____	Flush the toilet less.	____
____	Irrigate only your own gardens. Avoid runoff to the gutter, streets, or to your neighbors property.	____
____	Provide lawns and gardens only the amount of water they need for the weather.	____
____	Install low flow showerheads, aerators, and toilets.	____
____	Fix leaks and flapper valves in toilets.	____
____	Do not wash your car.	____
____	Water trees and gardens only 1/2 the time as normal.	____
____	Use a nozzle that shuts off automatically for hoses.	____

Credits

This HOT TOPICS newspaper supplement was commissioned by the Newspaper in Education (NIE) department of The Sacramento Bee.

- The writer was Mike Weilbacher, an award-winning environmental educator and free-lance science writer.
- Jeanine Reilly was the designer.
- Illustrations are by Joe Rademan.

Answer Key

Page 1: Ben's Mystery Quote
"When the well's dry, we all know the worth of water."

Page 5: The Water Cycle

1 evaporation	4 transpiration
2 condensation	5 percolation
3 precipitation	6 runoff

Page 7: Life Requires Water

1. e	3. d	5. c	
2. a	4. b	6. f	

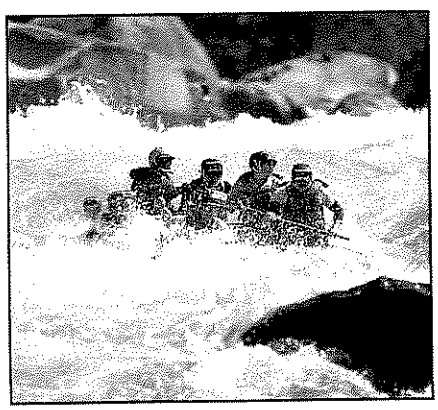
Clues:

1. Willow	6. New York City	
2. Hail	7. Trout	
3. Ohio	8. Leaf	
4. Leak	9. Winter	
5. Whale	10. Wetlands	

Wonderful Water Activities

If you've enjoyed the activities in this supplement, perhaps you and your class will consider continuing to dive in to water. Here are some more activities.

1. Divide your class into two groups. Have one build a scale model of a sewage treatment plant. Have the other build a scale model of a water treatment plant. Write your local water company for diagrams and photos of your local system; consider inviting a representative to speak to your class. Display the models in your school's lobby or hallway.
2. Read the letters to the editor in your newspaper. Write your own letter to the editor, about water efficiency.
3. Divide your class into two groups, boys and girls. Have each group create a large mural of the water cycle that is *installed in your school's restrooms!* And here's the fun part: can your mural somehow include paper pipes that lead to the sinks, toilets and urinals of the restroom? Can you create a work of art that also shows how water works?
4. Talk with your school's principal to determine if you can find out how much water your school consumes. Use the information you are given to figure out *how much each student in the school uses in one day.* Do you use more or less water at school than home? Add your school use plus your home use? What's the number? Use this new total, and go back to the Water Math questions on page 11. See what your new answers are.



5. Imagine you poured a gallon of water onto your school's lawn. After it trickles through the soil, it should emerge in a stream somewhere in your neighborhood. Use your library resources to look up the word "watershed." Can you find out what watershed you are in? What is your watershed's stream, creek or river? Is there a community organization that has adopted this stream? Invite them to come and talk about how you can help become a stream watcher.

A Letter to Me

Write yourself a letter by filling in the blanks provided.

Date: _____

Dear: _____
your name

To help conserve the world's water, from now on I am going to

_____.

I am also going to

_____.

not to mention

_____.

I am doing these things because

_____.

Yours truly,

_____
your name

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Wholesale

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit that we have on record for your agency in order to process a coverage report. Click here to open a table to obtain this number.

2009 BMP 1.1 Operation Practices for Wholesalers

View MOU

Wholesale agency assistance programs

a. Financial Investments and Building Partnerships

List the total monetary amount of financial incentives and equivalent resources provided to retail members to assist with, or to otherwise support, implementation of BMPs, subtotaled by BMP. List regional partnerships developed to encourage resource conservation and maximize economies of scale benefits.

BMP Section and/or Sub-section Name	Monetary Amount for Financial Incentives	Monetary Amount for Equivalent Resources

b. Technical Support

Supply a summary of types of technical support provided to retail agencies

The San Juan retail agencies are all members of the Regional Water Authority. RWA in certain respects acts as a wholesale agency for its members. RWA applies for regional grants and administers public outreach and school education campaigns that satisfy the requirements of the respective BMPs. San Juan staff attends CUWCC workshops and meetings on behalf of member agencies but San Juan has not held dedicated workshops on its own as there is no ne

c. Program Management

If your wholesale agency has assumed reporting responsibility, list the programs managed on behalf of the retail agencies.

Retail Agency Name	Program Name

version 1.0

d. Water Shortage Allocation

If a water shortage allocation plan or policy has been developed, provide the date of adoption and electronic link to the document or hardcopy.

08/01/2008

Date Format: 05/15/2010

11000 Prohibited Practices.pdf

Enter the file name of the document.
Send it to natalie@cuwcc.org

e. Non-signatory Reporting

Receipt of reports

Enter the file name of the document.
Send it to natalie@cuwcc.org

f. Encourage CUWCC Membership

List of efforts to recruit retailers and amount of dues paid on behalf of retail agencies.

BMP 1-1 Operations Attachment 2009.pdf

Enter the file name of the document.
Send it to natalie@cuwcc.org

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

Link to FAQs

View MOU

2009 BMP 1.2 Water Loss Control

Did your agency complete a pre-screening system audit in 2009? Yes ○ No ○

If yes, answer the following:

Determine metered sales in AF: 12,574.00

Definition: other accountable uses not included in metered sales, such as unbilled water use, fire suppression, etc.

Determine system verifiable uses AF: 0.00

Determine total supply into the system in AF: 13,569.00

Does your agency keep necessary data on file to verify the answers above? Yes ○ No ○

Did your agency complete a full-scale system water audit during 2009? Yes ○ No ○

Does your agency maintain in-house records of audit results or the completed AWWA worksheet for the completed audit which could be forwarded to CUWCC? Yes ○ No ○

Did your agency operate a system leak detection program? Yes ○ No ○

Comments:

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

BMP 1.3 Metering with Commodity

Link to FAQs

See the complete MOU: View MOU

See the coverage requirements for this BMP:

Implementation

Does your agency have any unmetered service connections? Yes No

If YES, has your agency completed a meter retrofit plan? Yes No

Enter the number of previously unmetered accounts fitted with meters during reporting year:

Are all new service connections being metered? Yes No

Are all new service connections being billed volumetrically? Yes No

Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters? Yes No

Please Fill Out The Following Matrix

Account Type	# Metered Accounts	# Metered Accounts Read	# Metered Accounts Billed by Volume	Billing Frequency Per Year	# of estimated bills/yr
Single-Family	9,761	9,761	9,761	Bi-monthly	6
Multi-Family	120	120	120	Bi-monthly	6
Commericial	236	236	236	Bi-monthly	6
Industrial	11	11	11	Bi-monthly	6
Dedicated Irrigatic	207	207	207	Bi-monthly	6
Agricultural	4	4	4	Bi-monthly	6
Other	8	8	8	Bi-monthly	6
Other				Other	
Other				Other	
Other				Other	

Number of CII Accounts with Mixed-use Meters: 255

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period: 0

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? Yes No

If YES, please fill in the following information:

A. When was the Feasiblity Study conducted

B. Email or provide a link to the feasibility study (or description of):

File name(s): Email files to natalie@cuwcc.org

Web address(s) URL: comma-separated list

General Comments about BMP 1.3:

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

Link to FAQs

2009

BMP 2.2 School Education Programs, Retail Agencies

View MOU

School Programs

Is a wholesale agency implementing school programs which can be counted to help your agency comply with this BMP? ○ Yes ○ No

Enter Wholesaler Names, separated by commas: San Juan Water District - Wholesale

☐ Materials meet state education framework requirements?

Description of Materials:
- Student supplements, written by an award-winning environmental educator and edited by water agency personnel.
- Teaching materials, online Be Water Smart teacher guides and activities
- California Waterways map
- Student contests for K-4th grades and 5th-8th grades
- Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the program

☐ Materials distributed to K-6 Students?

Description of materials distributed to K-6 Students:
- Student supplements, written by an award-winning environmental educator and edited by water agency personnel.
- Teaching materials, online Be Water Smart teacher guides and activities
- California Waterways map
- K-4 will receive a class set of "Water Conservation and You booklets"
- Student contests for K-4th grades and 5th-8th grades
- Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the program

Number of students reached: 4,247

☐ Materials distributed to 7-12 Students?

Description of materials distributed to 7-12 Students: None

Number of Distribution: 0

Annual budget for school education program: $46,500.00

Description of all other water supplier education programs:
- SJWD - Wholesale sponsors a Poster contest for its retail agencies. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an assortment of gift certificates from local businesses. The teacher of each student who placed in the contest receives $100 for classroom supplies.
- SJWD - Wholesale Participated in a science fair. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an assortment of gift certificates from local businesses. The teacher of each student who placed in the contest receives $100 for classroom supplies.
- The Water Bucks Program was developed as an opportunity to educate students on the efficient use of water. In exchange for student participation in identifying

School Program Activities

Classroom presentations:

Number of presentations: 5 Number of attendees:

Large group assemblies:

Number of presentations: 1 Number of attendees: 600

Children's water festivals or other events:

Number of presentations: 1 Number of attendees: 500

Cooperative efforts with existing science/water education programs (various workshops, science fair awards or judging) and follow-up:

Number of presentations: 5 Number of attendees: 363

Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):

Description: None

Number distributed: 0

Staffing children's booths at events & festivals:

Number of booths: 1 Number of attendees: 500

Water conservation contests such as poster and photo:

Description: • SJWD - Wholesale sponsors a Poster contest for its retail agencies. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an assortment of gift certificates from local businesses. The teacher of each student who placed in the contest receives $100 for classroom supplies.

Number distributed: 313

Offer monetary awards/funding or scholarships to students:

Number Offered: 0 Total Funding:

Teacher training workshops:

Number of presentations: 0 Number of attendees:

Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens, etc.:

Number of tours or field trips: 2 Number of participants: 306

College internships in water conservation offered:

Number of internships: 0 Total funding:

Career fairs/workshops:

Number of presentations: 0 Number of attendees:

Additional program(s) supported by agency but not mentioned above:

Description: • The Water Bucks Program was developed as an opportunity to educate students on the efficient use of water. In exchange for student participation in identifying and reporting leaks and other signs of water waste, the District rebates the amount of the school's water bill (that is paid by the school district) directly back to the school. To date, the District has given back a total of more than $300,000 to the elementary schools in our service area.

Number of events (if applicable): Number of participants: 240

Total reporting period budget expenditures for school education programs (include all agency costs): 46500

Comments

San Juan Water District
Canadian Model Worksheets

MODULE 1 - BASE DATA AND ASSUMPTIONS

MODU

BASE YEAR	2009	<-- FY 09-10
INTEREST RATE CHARGED ON DEB	6.0%	
INTEREST RATE EARNED ON FUNDS	0.5%	
RATE OF INFLATION	3.0%	
DEBENTURE PERIOD (yr's)	20	

WATE

	WATER	WASTEWATER
		NOT IN USE
2009 OPENING BALANCE FOR RESERVES ($1000's):		
Rate Stabilization Reserve	$0	$0
Capital Reserves	$13,000	$0
NUMBER OF BILLING PERIODS/YR	6	12
NUMBER OF PEAK SEASON MONTH	0	NA
AVERAGE WATER USE PER FLAT RATE CUSTOMER (CCF/period)	0.0	0.0

WAS

San Juan Water District
Canadian Model Worksheets

JLE 2 - FORECAST SERVICE REQUIREMENTS (1,000 CCF)

ER	2009	2010	2011	2012	2013
METERED USE					
Peak Season	0	0	0	0	0
Total Annual	4,998	5,175	5,489	5,881	5,939
ESTIMATED FLAT RATE USE					
Total Annual	0	0	0	0	0
ESTIMATED TOTAL USE					
Peak Season	0	0	0	0	0
Total Annual	4,998	5,175	5,489	5,881	5,939
TOTAL PUMPAGE					
Peak Season	0	0	0	0	0
Total Annual	5,526	5,627	5,907	6,294	6,564
UNACCOUNTED FOR WATE	528	452	418	413	625
% UNACCOUNTED	9.6%	8.0%	7.1%	6.6%	9.5%
TEWATER					
BILLABLE ANNUAL FLOW					
Metered Flow	0	0	0	0	0
Est'd Flat Rate Flow	0	0	0	0	0
Total Billable Flow	0	0	0	0	0

San Juan Water District
Canadian Model Worksheets

MODULE 3 - FORECAST CUSTOMER SERVICE CONNECTIONS (#'s)

	2009	2010	2011	2012	2013
WATER					
METERED SERVICES					
5/8"	0	0	0	0	0
3/4"	0	0	0	0	0
1.0"	9,921	9,921	9,921	9,971	10,071
1.5"	106	106	106	107	108
2.0"	157	157	157	158	160
3.0"	26	26	26	26	26
4.0"	3	3	3	3	3
6.0"	0	0	0	0	0
8.0"	0	0	0	0	0
10+"	0	0	0	0	0
FLAT RATE SERVICES	0	0	0	0	0
TOTAL SERVICES	10,213	10,213	10,213	10,265	10,368

WASTEWATER					
SERVICES WITH WATER METERS					
5/8"	0	0	0	0	0
3/4"	0	0	0	0	0
1.0"	0	0	0	0	0
1.5"	0	0	0	0	0
2.0"	0	0	0	0	0
3.0"	0	0	0	0	0
4.0"	0	0	0	0	0
6.0"	0	0	0	0	0
8.0"	0	0	0	0	0
10+"	0	0	0	0	0
FLAT RATE SERVICES	0	0	0	0	0
TOTAL SERVICES	0	0	0	0	0

San Juan Water District
Canadian Model Worksheets

MODULE 4 - EQUIVALENT COST OF SERVICE RATIOS FOR COST ALLOCATION

WATER	METERING	BILLING	OTHER
WATER SERVICE CONNECTION SIZE	(equivalent service units/connection)		
5/8"	0.73	1	1
3/4"	0.73	1	1
1.0"	0.73	1	2
1.5"	2.0	1	5
2.0"	3.2	1	12
3.0"	6.4	1	25
4.0"	10.0	1	45
6.0"	0.0	1	85
8.0"	0.0	1	150
10+"	0.0	1	250
FLAT RATE SERVICES	1.0	1	1

WASTEWATER			
WATER SERVICE CONNECTION SIZE	(equivalent service units/connection)		
5/8"	1.0	1	1
3/4"	1.1	1	1
1.0"	1.4	1	2
1.5"	1.8	1	5
2.0"	2.9	1	12
3.0"	11.0	1	25
4.0"	14.0	1	45
6.0"	21.0	1	85
8.0"	29.0	1	150
10+"	40.0	1	250
FLAT RATE SERVICES	1.0	1	1

San Juan Water District
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MODULE 5 - O&M COST ALLOCATION ASSUMPTIONS

MODUL

ACCOUNT CATEGORY	VOLUME	METERING	BILLING	OTHER
WATER				
Source of Supply	82%	18%	0%	0%
Pumping & Telemetry	57%	43%	0%	0%
Trans. & Distrib.	0%	100%	0%	0%
Customer Service	0%	0%	100%	0%
Conservation	100%	0%	0%	0%
Engineering	0%	100%	0%	0%
Admin. & General	20%	80%	0%	0%
Debt Service	0%	100%	0%	0%
Cap. Replac. Transfer	0%	100%	0%	0%
Change in Fund Balance	100%	0%	0%	0%
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
OVERALL ALLOCATION (Weighted Average)	31.2%	60.8%	7.9%	0.0%
WASTEWATER				
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
(not in use)	0%	0%	0%	0%
OVERALL ALLOCATION (Weighted Average)	#N/A	#N/A	#N/A	#N/A

WASTE

San Juan Water District
Canadian Model Worksheets

E 6 - REVENUE REQUIREMENTS FOR O&M COSTS ($1000's) MODU

ACCOUNT CATEGORY	2009	2010	2011	2012	2013
Source of Supply	$1,665	$1,758	$1,560	$1,722	$1,880
Pumping & Telemetry	$105	$387	$715	$762	$816
Trans. & Distrib.	$1,497	$1,503	$1,548	$1,594	$1,642
Customer Service	$588	$637	$657	$677	$697
Conservation	$437	$405	$417	$430	$443
Engineering	$362	$334	$344	$354	$365
Admin. & General	$1,152	$1,191	$1,229	$1,268	$1,308
Debt Service	$1,851	$1,851	$2,039	$1,554	$1,779
Cap. Replac. Transfer	$0	$0	($850)	($425)	$0
Change in Fund Balance	$347	($223)	$384	$391	($57)
(not in use)	$0				
(not in use)	$0				
(not in use)	$0				
REVENUE REQUIREMEN FOR O&M COSTS	$8,004	$7,843	$8,043	$8,327	$8,873

WATE

WATER

WAS

(not in use)	$0				
(not in use)	$0				
(not in use)	$0				
(not in use)	$0				
(not in use)	$0				
(not in use)	$0				
(not in use)	$0				
(not in use)	$0				
(not in use)	$0				
(not in use)	$0				
(not in use)	$0				
(not in use)	$0				
(not in use)	$0				
REVENUE REQUIREMEN FOR O&M COSTS	$0	$0	$0	$0	$0

San Juan Water District
Canadian Model Worksheets

JLE 7 - ALLOCATION OF O&M COSTS ($1000's)

ER	2009	2010	2011	2012	2013
TOTAL 0M&A COSTS	$8,004	$7,843	$8,043	$8,327	$8,873
ALLOCATED O&M COSTS					
Volumetric Portion	31.2%	31.2%	31.2%	31.2%	31.2%
Volumetric O&M Cost	$2,497	$2,447	$2,509	$2,598	$2,768
Metering Portion	60.8%	60.8%	60.8%	60.8%	60.8%
Metering O&M Cost	$4,866	$4,769	$4,890	$5,063	$5,395
Billing Portion	7.9%	7.9%	7.9%	7.9%	7.9%
Billing O&M Cost	$632	$620	$635	$658	$701
TOTAL ALLOCATED O&M	$7,996	$7,835	$8,035	$8,319	$8,864
RESIDUAL PORTION	0.0%	0.0%	0.0%	0.0%	0.0%
RESIDUAL O&M COST	$0	$0	$0	$0	$0
TEWATER					
TOTAL 0M&A COSTS	$0	$0	$0	$0	$0
ALLOCATED O&M COSTS					
Volumetric Portion	#N/A	#N/A	#N/A	#N/A	#N/A
Volumetric O&M Cost	#N/A	#N/A	#N/A	#N/A	#N/A
Metering Portion	#N/A	#N/A	#N/A	#N/A	#N/A
Metering O&M Cost	#N/A	#N/A	#N/A	#N/A	#N/A
Billing Portion	#N/A	#N/A	#N/A	#N/A	#N/A
Billing O&M Cost	#N/A	#N/A	#N/A	#N/A	#N/A
TOTAL ALLOCATED O&M	#N/A	#N/A	#N/A	#N/A	#N/A
RESIDUAL PORTION	#N/A	#N/A	#N/A	#N/A	#N/A
RESIDUAL O&M COST	#N/A	#N/A	#N/A	#N/A	#N/A

San Juan Water District
Canadian Model Worksheets

MODULE 8 - REVENUE REQUIREMENTS FOR CAPITAL FINANCE ($1000's)

	2009	2010	2011	2012	2013
WATER					
GROSS REQUIREMENTS FOR CAPITAL FINANCE					
Total Investments	$0	$0	$0	$0	$0
Revenues to Reserves	$0	$0	$0	$0	$0
Existing Debt Service	$0	$0	$0	$0	$0
New Debt Service	$0	$0	$0	$0	$0
Total	$0	$0	$0	$0	$0
NON-REVENUE PROCEEDS FOR CAPITAL FINANCE					
New Debentures	$0	$0	$0	$0	$0
Applied Reserves	$0	$0	$0	$0	$0
Other (eg. grants)	$0	$0	$0	$0	$0
Total	$0	$0	$0	$0	$0
NET REV. REQUIREMENT FOR CAPITAL FINANCE	$0	$0	$0	$0	$0
WASTEWATER					
GROSS REQUIREMENTS FOR CAPITAL FINANCE					
Total Investments	$0	$0	$0	$0	$0
Revenues to Reserves	$0	$0	$0	$0	$0
Existing Debt Service	$0	$0	$0	$0	$0
New Debt Service	$0	$0	$0	$0	$0
Total	$0	$0	$0	$0	$0
NON-REVENUE PROCEEDS FOR CAPITAL FINANCE					
New Debentures	$0	$0	$0	$0	$0
Applied Reserves	$0	$0	$0	$0	$0
Other (eg. grants)	$0	$0	$0	$0	$0
Total	$0	$0	$0	$0	$0
NET REV. REQUIREMENT FOR CAPITAL FINANCE	$0	$0	$0	$0	$0

San Juan Water District
Canadian Model Worksheets

MODULE 9 - NON-RATE REVENUES ($1000's)

	2009	2010	2011	2012
WATER				
NON-RATE REVENUES				
Folsom Pump Rev	$0	$27	$88	$96
Constr. Wtr. Sales	$13	$11	$11	$11
Fire Service Fees	$20	$20	$21	$21
Penalties & Late Fees	$46	$35	$36	$37
Op Fund Interest Earnings	$3	$2	$17	$31
Grants & Rebates	$89	$43	$40	$40
(not in use)	$0	$0	$0	$0
Total Non-Rate Rev.	$171	$138	$213	$236
RESERVE FUND TRANSFEI TO STABILIZE RATES	$0	$0	$0	$0
NET NON-RATE REVENUES	$171	$138	$213	$236
WASTEWATER				
NON-RATE REVENUES				
(not in use)	$10	$10	$11	$11
(not in use)	$250	$258	$265	$273
(not in use)	$25	$26	$27	$27
(not in use)	$0	$0	$0	$0
(not in use)	$0	$0	$0	$0
(not in use)	$0	$0	$0	$0
(not in use)	$0	$0	$0	$0
Total Other	$285	$294	$302	$311
RESERVE FUND TRANSFEI TO STABILIZE RATES	$0	$0	$0	$0
NET NON-RATE REVENUES	$285	$294	$302	$311
EXTRA-STRENGTH SURCHARGE REVENUE	$100	$103	$106	$109

San Juan Water District
Canadian Model Worksheets

MODULE 10 - INVESTMENTS IN THE TEN YEAR CAPITAL PLAN ($1000's)

2013	WATER	YEAR	GROSS INVESTMENT COST	PORTION ALLOCATED TO VOLUME
$103				
$12		2009	$0	0.0%
$22		2010	$0	0.0%
$38		2011	$0	0.0%
$50		2012	$0	0.0%
$40		2013	$0	0.0%
$0		2014	$3,937	0.0%
		2015	$1,976	0.0%
$265		2016	$2,278	0.0%
		2017	$976	0.0%
$0		2018	$625	0.0%
	TOTAL INVESTMENT COSTS			
	PRESENT VALUE OF COSTS			
$265	ANNUALIZED COST FOR 2009			

	WASTEWATER	YEAR	TOTAL INVESTMENT COST	PORTION ALLOCATED TO VOLUME
$11				
$281		2009	$0	0.0%
$28		2010	$0	0.0%
$0		2011	$0	0.0%
$0		2012	$0	0.0%
$0		2013	$0	0.0%
$0		2014	$0	0.0%
		2015	$0	0.0%
$321		2016	$0	0.0%
		2017	$0	0.0%
$0		2018	$0	0.0%
	TOTAL INVESTMENT COSTS			
$321	PRESENT VALUE OF COSTS			
	ANNUALIZED COST FOR 2009			
$113				

San Juan Water District
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MODULE 11 - CALCULATION AND ALLOCATION OF RESIDUAL COSTS ($

VOLUMETRIC INVESTMENT COST	WATER	2009	2010	2011
	TOTAL RESIDUAL COSTS			
	Tot. Revenue Req't	$8,004	$7,843	$8,043
$0	Less Non-Rate Rev.	($171)	($138)	($213)
$0	Net Revenue Req't	$7,833	$7,705	$7,830
$0	Less Allocated O&M	($7,996)	($7,835)	($8,035)
$0	Residual Costs (A)	($163)	($130)	($205)
$0	VOLUMETRIC CAPITAL COMPONENT			
$0	Annualized Investment	$0	$0	$0
$0	Capital Finance to Volume			
$0	Allocation Factor	0.0%	0.0%	0.0%
$0	Req't for Finance	$0	$0	$0
$0	Allocated to Volume	$0	$0	$0
$0	Total (B)	$0	$0	$0
$0	ALLOCATION OF RESIDUAL COSTS			
$0	Vol. (B or A if B>A)	($163)	($130)	($205)
	Fix. (A less volume)	$0	$0	$0

VOLUMETRIC INVESTMENT COST	WASTEWATER			
	TOTAL RESIDUAL COSTS			
	Tot. Revenue Req't	$0	$0	$0
$0	Less Non-Rate Rev.	($285)	($294)	($302)
$0	Net Revenue Req't	($285)	($397)	($408)
$0	Less Allocated O&M	#N/A	#N/A	#N/A
$0	Residual Costs (A)	#N/A	#N/A	#N/A
$0	VOLUMETRIC CAPITAL COMPONENT			
$0	Annualized Investment	$0	$0	$0
$0	Capital Finance to Volume			
$0	Allocation Factor	0.0%	0.0%	0.0%
$0	Req't for Finance	$0	$0	$0
$0	Allocated to Volume	$0	$0	$0
$0	Total (B)	$0	$0	$0
$0	ALLOCATION OF RESIDUAL COSTS			
$0	Vol. (B or A if B>A)	#N/A	#N/A	#N/A
	Fix. (A less volume)	#N/A	#N/A	#N/A

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1000's) 2012	2013	MODULE 12 - UNIT VOLUMETRIC COSTS ($'s/CCF)	2009	2010
		WATER		
		VOLUMETRIC COSTS ($1000's)		
$8,327	$8,873	O&M	$2,497	$2,447
($236)	($265)	Capital (Volumetric	($163)	($130)
$8,091	$8,608	Residual Cost)		
($8,319)	($8,864)			
($228)	($256)	Total Volumetric	$2,334	$2,317
			30%	30%
$0	$0	WATER USE (1,000 CCF)		
		Peak Season	0	0
0.0%	0.0%	Total Annual	4,998	5,175
$0	$0			
$0	$0	UNIT COSTS ($'s/CCF)		
$0	$0	Annual O&M	$0.500	$0.473
		Peak Seas. Capital	#DIV/0!	#DIV/0!
($228)	($256)	Annual Capital	($0.033)	($0.025)
$0	$0			
		WASTEWATER		
		VOLUMETRIC COSTS ($1000's)		
$0	$0	O&M	#N/A	#N/A
($311)	($321)	Capital (Volumetric	#N/A	#N/A
($421)	($433)	Residual Cost)		
#N/A	#N/A			
#N/A	#N/A	Total Volumetric	#N/A	#N/A
$0	$0	LESS RECOVERED EXTRA STRENGTH COSTS	($100)	($103)
0.0%	0.0%			
$0	$0	NET VOLUMETRIC COSTS	#N/A	#N/A
$0	$0			
$0	$0	BILLABLE FLOW (1,000 CCF)		
		Total Annual	0	0
#N/A	#N/A			
#N/A	#N/A	UNIT COSTS ($'s/CCF)		
		Total Annual	#N/A	#N/A

San Juan Water District
Canadian Model Worksheets

MODULE 13 - ANNUAL COSTS PER EQUIVALE

2011	2012	2013		2009
			WATER	
			METERING COSTS	
$2,509	$2,598	$2,768	Cost/yr ($1000's)	$4,866
($205)	($228)	($256)	Service Units (#)	8,153
			Cost/Unit ($'s)	$596.875
$2,305	$2,370	$2,512	BILLING COSTS	
29%	29%	29%	Cost/yr ($1000's)	$632
			Service Units (#)	10,213
0	0	0	Cost/Unit ($'s)	$61.911
5,489	5,881	5,939		
			RESIDUAL FIXED COSTS	
			Cost/yr ($1000's)	$0
$0.457	$0.442	$0.466	Service Units (#)	23,041
#DIV/0!	#DIV/0!	#DIV/0!	Cost/Unit ($'s)	$0.000
($0.037)	($0.039)	($0.043)		
			WASTEWATER	
			METERING COSTS	
#N/A	#N/A	#N/A	Cost/yr ($1000's)	#N/A
#N/A	#N/A	#N/A	Service Units (#)	0
			Cost/Unit ($'s)	#N/A
#N/A	#N/A	#N/A	BILLING COSTS	
			Cost/yr ($1000's)	#N/A
($106)	($109)	($113)	Service Units (#)	0
			Cost/Unit ($'s)	#N/A
#N/A	#N/A	#N/A	RESIDUAL FIXED COSTS	
			Cost/yr ($1000's)	#N/A
			Service Units (#)	0
0	0	0	Cost/Unit ($'s)	#N/A
#N/A	#N/A	#N/A		

San Juan Water District
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NT 5/8" SERVICE UNIT	NOT IN USE		
2010	2011	2012	2013
$4,769	$4,890	$5,063	$5,395
8,153	8,153	8,195	8,276
$584.867	$599.782	$617.804	$651.843
$620	$635	$658	$701
10,213	10,213	10,265	10,368
$60.668	$62.215	$64.082	$67.612
$0	$0	$0	$0
23,041	23,041	23,158	23,387
$0.000	$0.000	$0.000	$0.000
#N/A	#N/A	#N/A	#N/A
0	0	0	0
#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A
0	0	0	0
#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A
0	0	0	0
#N/A	#N/A	#N/A	#N/A

MODULE 14 - CALCULATED RATE S

	2009
WATER	
VOLUMETRIC CHARGE RA	
Uniform	$0.467
Peak	#DIV/0!
Off-Peak	$0.500
FIXED CHARGES PER BILI	
5/8"	$82.938
3/4"	$82.938
1.0"	$82.938
1.5"	$209.277
2.0"	$328.652
3.0"	$646.985
4.0"	$1,005.110
6.0"	$10.319
8.0"	$10.319
10+"	$10.319
FLAT RATE	$0.000
WASTEWATER	
SURCHARG	#N/A
VOLUMETRIC CHARGE RA	
	#N/A
FIXED CHARGES PER BILI	
5/8"	#N/A
3/4"	#N/A
1.0"	#N/A
1.5"	#N/A
2.0"	#N/A
3.0"	#N/A
4.0"	#N/A
6.0"	#N/A
8.0"	#N/A
10+"	#N/A
FLAT RATE	$0.000

San Juan Water District
Canadian Model Worksheets

SCHEDULE	NOT IN USE		
2010	2011	2012	2013
ATES ($'s/CCF)			
$0.448	$0.420	$0.403	$0.423
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
$0.473	$0.457	$0.442	$0.466
LING PERIOD ($'s)			
$81.270	$83.343	$85.846	$90.576
$81.270	$83.343	$85.846	$90.576
$81.270	$83.343	$85.846	$90.576
$205.067	$210.297	$216.615	$228.550
$322.040	$330.253	$340.176	$358.918
$633.969	$650.137	$669.671	$706.568
$984.890	$1,010.006	$1,040.354	$1,097.674
$10.111	$10.369	$10.680	$11.269
$10.111	$10.369	$10.680	$11.269
$10.111	$10.369	$10.680	$11.269
$0.000	$0.000	$0.000	$0.000
#N/A	#N/A	#N/A	#N/A
ATES ($'s/CCF)			
#N/A	#N/A	#N/A	#N/A
LING PERIOD ($'s)			
#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A
#N/A	#N/A	#N/A	#N/A
$0.000	$0.000	$0.000	$0.000

MODULE 15 - ESTIMATED ANNU

WATER
- UNIFORM RATE REVENU
  - Volumetric Charges
  - Fixed Meter Charges
  - Flat Rate Charges
  - Total Revenue
- SEASONAL RATE REVEN
  - Volumetric Charges
    - Peak Season Rev.
    - Off-Peak Rev.
  - Fixed Meter Charges
  - Flat Rate Charges
  - Total Revenue
- AVERAGE RATE REVENU
- LESS REVENUE REQU'N
- SURPLUS (DEFICIT)

WASTEWATER
- UNIFORM RATE REVENU
  - Volumetric Charge
    - Revenue
  - Fixed Meter Charges
  - Flat Rate Charges
  - Extra Strength Chg
  - Total Revenue
- LESS REVENUE REQU'N
- SURPLUS (DEFICIT)

San Juan Water District
Canadian Model Worksheets

AL REVENUES ($1000's)			NOT IN USE		MODU
2009	2010	2011	2012	2013	
					WATEI
ES					
$2,334	$2,318	$2,305	$2,370	$2,512	
$5,499	$5,388	$5,526	$5,721	$6,096	
$0	$0	$0	$0	$0	
$7,833	$7,706	$7,831	$8,091	$8,608	
UES					
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
$2,499	$2,448	$2,508	$2,599	$2,768	
$5,499	$5,388	$5,526	$5,721	$6,096	
$0	$0	$0	$0	$0	
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
($7,833)	($7,705)	($7,830)	($8,091)	($8,608)	
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
					WASTI
ES					
#N/A	#N/A	#N/A	#N/A	#N/A	
#N/A	#N/A	#N/A	#N/A	#N/A	
$0	$0	$0	$0	$0	
$100	$103	$106	$109	$113	
#N/A	#N/A	#N/A	#N/A	#N/A	
$285	$397	$408	$421	$433	
#N/A	#N/A	#N/A	#N/A	#N/A	

San Juan Water District
Canadian Model Worksheets

LE 16 - STATUS OF RESERVE FUNDS ($1000's) NOT IN USE MODU

R	2009	2010	2011	2012	2013	WATE
RATE STABILIZATION FUND						
Opening Balance	$0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
Interest earnings	$0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
Surplus (Deficit)	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
Transfers from (to) Revenue	$0	$0	$0	$0	$0	
Closing Balance	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
CAPITAL RESERVES						
Opening Balance	$13,000	$13,065	$13,130	$13,196	$13,262	
Interest earnings	$65	$65	$66	$66	$66	
Funds Applied to Investments	$0	$0	$0	$0	$0	
Developer Contrib'ns	$0	$0	$0	$0	$0	
Revenues Transfered to Reserves	$0	$0	$0	$0	$0	
Closing Balance	$13,065	$13,130	$13,196	$13,262	$13,328	
EWATER						WAS
RATE STABILIZATION FUND						
Opening Balance	$0	#N/A	#N/A	#N/A	#N/A	
Interest earnings	$0	#N/A	#N/A	#N/A	#N/A	
Surplus (Deficit)	#N/A	#N/A	#N/A	#N/A	#N/A	
Transfers from (to) Revenue	$0	$0	$0	$0	$0	
Closing Balance	#N/A	#N/A	#N/A	#N/A	#N/A	
CAPITAL RESERVES						
Opening Balance	$0	$0	$0	$0	$0	
Interest earnings	$0	$0	$0	$0	$0	
Funds Applied to Investments	$0	$0	$0	$0	$0	
Developer Contrib'ns	$0	$0	$0	$0	$0	
Revenues Transfered to Reserves	$0	$0	$0	$0	$0	
Closing Balance	$0	$0	$0	$0	$0	

San Juan Water District
Canadian Model Worksheets

JLE 17 - IMPACT OF 2009 MODEL RATES ON REPRESENTATIVE CUSTO NOT IN USE MODUL

ER WATER

METER SIZE	AVERAGE WATER USE (CCF/period) Off-Peak	Peak	AVERAGE WATER BILL Existing Rate	Uniform Model Rate	sonal Model Rates Off-Peak	Peak
5/8"	0	0	$0.0	$82.9	$82.9	#DIV/0!
3/4"	0	0	$0.0	$82.9	$82.9	#DIV/0!
1.0"	0	0	$0.0	$82.9	$82.9	#DIV/0!
1.5"	0	0	$0.0	$209.3	$209.3	#DIV/0!
2.0"	0	0	$0.0	$328.7	$328.7	#DIV/0!
3.0"	0	0	$0.0	$647.0	$647.0	#DIV/0!
4.0"	0	0	$0	$1,005	$1,005	#DIV/0!
6.0"	0	0	$0	$10	$10	#DIV/0!
8.0"	0	0	$0	$10	$10	#DIV/0!
10+"	0	0	$0	$10	$10	#DIV/0!
FLAT RATE CUSTOMERS			$10.0	$0.0	$0.0	$0.0

TEWATER WASTE

METER SIZE	AVERAGE BILLABLE FLOW (CU.M./PERIOD) Off-Peak	Peak	AVERAGE WASTEWATER BILL Existing Rate	Model Rate
5/8"	0	0	$0.0	#N/A
3/4"	0	0	$0.0	#N/A
1.0"	0	0	$0.0	#N/A
1.5"	0	0	$0.0	#N/A
2.0"	0	0	$0.0	#N/A
3.0"	0	0	$0.0	#N/A
4.0"	0	0	$0	#N/A
6.0"	0	0	$0	#N/A
8.0"	0	0	$0	#N/A
10+"	0	0	$0	#N/A
FLAT RATE CUSTOMERS			$10.0	$0.0

San Juan Water District
Canadian Model Worksheets

E 19 - ANNUAL REVENUES WITH OPTIONAL RATES ($1000's) NOT IN USE MODU

	2009	2010	2011	2012	2013	
						WATEI
UNIFORM RATE REVENUES						
Volumetric Charges	$0	$0	$0	$0	$0	
Fixed Meter Charges	$0	$0	$0	$0	$0	
Flat Rate Charges	$0	$0	$0	$0	$0	
Total Revenue	$0	$0	$0	$0	$0	
SEASONAL RATE REVENUES						
Volumetric Charges						
Peak Season Rev.	#N/A	#N/A	#N/A	#N/A	#N/A	
Off-Peak Rev.	#N/A	#N/A	#N/A	#N/A	#N/A	
Fixed Meter Charges	#N/A	#N/A	#N/A	#N/A	#N/A	
Flat Rate Charges	#N/A	#N/A	#N/A	#N/A	#N/A	
Total Revenue	#N/A	#N/A	#N/A	#N/A	#N/A	
AVERAGE RATE REVENU	$0	$0	$0	$0	$0	
LESS REVENUE REQU'N	($7,833)	($7,705)	($7,830)	($8,091)	($8,608)	
SURPLUS (DEFICIT)	($7,833)	($7,705)	($7,830)	($8,091)	($8,608)	
WATER						WASTI
UNIFORM RATE REVENUES						
Volumetric Charge Revenue	$0	$0	$0	$0	$0	
Fixed Meter Charges	$0	$0	$0	$0	$0	
Flat Rate Charges	$0	$0	$0	$0	$0	
Extra Strength Chg	$100	$103	$106	$109	$113	
Total Revenue	$100	$103	$106	$109	$113	
LESS REVENUE REQU'N	$285	$397	$408	$421	$433	
SURPLUS (DEFICIT)	$385	$500	$514	$530	$546	

San Juan Water District
Canadian Model Worksheets

LE 20 - STATUS OF RESERVE FUNDS WITH OPTIONAL RATES ($1(NOT IN USE MODU

	2009	2010	2011	2012	2013
R					WATE
RATE STABILIZATION FUND					
Opening Balance	$0	($7,833)	($15,538)	($23,368)	($31,459)
Interest earnings	$0	$0	$0	$0	$0
Surplus (Deficit)	($7,833)	($7,705)	($7,830)	($8,091)	($8,608)
Transfers from (to) Revenue	$0	$0	$0	$0	$0
Closing Balance	($7,833)	($15,538)	($23,368)	($31,459)	($40,067)
CAPITAL RESERVES					
Opening Balance	$13,000	$13,065	$13,130	$13,196	$13,262
Interest earnings	$65	$65	$66	$66	$66
Funds Applied to Investments	$0	$0	$0	$0	$0
Developer Contrib'ns	$0	$0	$0	$0	$0
Revenues Transfered to Reserves	$0	$0	$0	$0	$0
Closing Balance	$13,065	$13,130	$13,196	$13,262	$13,328
EWATER					WAS
RATE STABILIZATION FUND					
Opening Balance	$0	$385	$887	$1,405	$1,943
Interest earnings	$0	$2	$4	$7	$10
Surplus (Deficit)	$385	$500	$514	$530	$546
Transfers from (to) Revenue	$0	$0	$0	$0	$0
Closing Balance	$385	$887	$1,405	$1,943	$2,498
CAPITAL RESERVES					
Opening Balance	$0	$0	$0	$0	$0
Interest earnings	$0	$0	$0	$0	$0
Funds Applied to Investments	$0	$0	$0	$0	$0
Developer Contrib'ns	$0	$0	$0	$0	$0
Revenues Transfered to Reserves	$0	$0	$0	$0	$0
Closing Balance	$0	$0	$0	$0	$0

San Juan Water District
Canadian Model Worksheets

JLE 21 - IMPACT OF OPTIONAL 1992 RATES ON REPRESENTATIVE CUST NOT IN USE

ER METER SIZE	AVERAGE WATER USE (CFF/PERIOD) Off-Peak	Peak	AVERAGE WATER BILL Existing Rates	Uniform Model Rates	sonal Model Rates Off-Peak	Peak
5/8"	0	0	$0.0	$0.0	$0.0	$0.0
3/4"	0	0	$0.0	$0.0	$0.0	$0.0
1.0"	0	0	$0.0	$0.0	$0.0	$0.0
1.5"	0	0	$0.0	$0.0	$0.0	$0.0
2.0"	0	0	$0.0	$0.0	$0.0	$0.0
3.0"	0	0	$0.0	$0.0	$0.0	$0.0
4.0"	0	0	$0	$0	$0	$0
6.0"	0	0	$0	$0	$0	$0
8.0"	0	0	$0	$0	$0	$0
10+"	0	0	$0	$0	$0	$0
FLAT RATE CUSTOMERS			$10.0	$0.0	$0.0	$0.0

TEWATER METER SIZE	AVERAGE BILLABLE FLOW (CFF/PERIOD) Off-Peak	Peak	AVG. WASTEWATER BILL Existing Rates	Model Rates
5/8"	0	0	$0.0	$0.0
3/4"	0	0	$0.0	$0.0
1.0"	0	0	$0.0	$0.0
1.5"	0	0	$0.0	$0.0
2.0"	0	0	$0.0	$0.0
3.0"	0	0	$0.0	$0.0
4.0"	0	0	$0	$0
6.0"	0	0	$0	$0
8.0"	0	0	$0	$0
10+"	0	0	$0	$0
FLAT RATE CUSTOMERS			$10.0	$0.0

California Urban Water Conservation Council

TARGETS / COMPLIANCE
(CUWCC MOU)

Baseline / Initial GPCD
(Use option buttons to select)

GPCD in 2006 ○	442.6
Baseline GPCD (1997 to 2006) ◉	498.7
GPCD in 2010	368.9
GPCD Target for 2018	408.9

Potable Water GPCD for each Year in the Baseline Period

Year	GPCD
2006	442.6
2005	493.7
2004	552.6
2003	532.1
2002	545.0
2001	517.0
2000	474.3
1999	484.0
1998	422.8
1997	522.6

Biennial GPCD Compliance Table

Year	Report	Target		Highest Acceptable Bound	
		% Base	GPCD	% Base	GPCD
2010	1	96.4%	480.7	100%	498.7
2012	2	92.8%	462.8	96.4%	480.7
2014	3	89.2%	444.8	92.8%	462.8
2016	4	85.6%	426.9	89.2%	444.8
2018	5	82.0%	408.9	82.0%	408.9

Monthly GPCD Data for Weather Normalization

Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
2010	368.9	368.9	368.9	368.9	368.9	368.9	368.9	368.9	368.9	368.9	368.9	368.9
Baseline avg*	498.7	498.7	498.7	498.7	498.7	498.7	498.7	498.7	498.7	498.7	498.7	498.7

* The average for each month is based on the baseline period 1997 to 2006

California Urban Water Conservation Council

TARGETS / COMPLIANCE (SBx7-7)

Input cells:

Calculated cells:

Target Summary	2020	2015
Method 1	406.7	457.6
Method 2	0.0	254.2
Method 3	0.0	0.0
Method 4	0.0	0.0
	Min Value	Max Value

GPCD in 2010	368.9
Base daily per capita water use (10-15yr baseline)	508.4
Base daily per capita water use (5yr baseline)	501.6
Max. allowable GPCD target in 2020 (95% x 5yr baseline)	476.5

Method 1: Baseline per Capita Water Use

80% x Base daily per capita water use (10-15yr baseline): 406.7

2015 Target: 457.6
2020 Target: **406.7**

Method 2: Performance Standards

TM 2 Indoor Water Use allowance: 0.0

TM 6 Landscaped Area Water Use: 0.0

TM 7 Baseline CII Water Use: 0.0

2015 Target: 254.2
2020 Target: **0.0**

Method 3: Hydrologic Region Targets

Enter the percentage of your service area population in each hydrologic region

Region	Region Name	% Population	GPCD Target
1	North Coast		137
2	San Francisco Bay		131
3	Central Coast		123
4	South Coast		149
5	Sacramento River		176
6	San Jacinto		174
7	Tulare lake		188
8	North Lahontan		173
9	South Lahontan		170
10	Colorado River		211
		0.0%	

2015 Target: 0.0
2020 Target: **0.0**

Method 4

To be Determined in 2011…

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

Link to FAQs

2010

BMP 1.1 Operations Practices

Comments:

See the complete MOU: View MOU

See the coverage requirements for this BMP:

Conservation Coordinator

Conservation Coordinator ◯ Yes ◯ No

Contact Information

First Name	Vicki
Last Name	Sacksteder
Title	Water Resources Analyst
Phone	916-791-6933
Email	vsacksteder@sjwd.org

Note that the contact information may be the same as the primary contact information at the top of the page. If this is your case, excuse the inconvenience but please enter the information again.

Water Waste Prevention

Water Agency shall do one or more of the following:

a. Enact and enforce an ordinance or establish terms of service that prohibit water waste
b. Enact and enforce an ordinance or establish terms of service for water efficient design in new development
c. Support legislation or regulations that prohibit water waste
d. Enact an ordinance or establish terms of service to facilitate implementation of water shortage response measures
e. Support local ordinances that prohibit water waste
f. Support local ordinances that establish permits requirements for water efficient design in new

To document this BMP, provide the following:

a. A description of, or electronic link to, any ordinances or terms of service
b. A description of, or electronic link to, any ordinances or requirements adopted by local jurisdictions or regulatory agencies with the water agency's service area.
c. A description of any water agency efforts to cooperate with other entities in the adoption or enforcement of local requirement
d. description of agency support positions with respect to adoption of legislation or regulations

You can show your documentation by providing files, links (web addresses), and/or entering a description.

File name(s): Email files to natalie@cuwcc.org 11000 Prohibited Practices.pdf

Web address(s) URL: comma-separated list

Enter a description: San Juan Water District Code of Ordinances, Section 23000 District Water Conservation Program, amended August 1, 2008.

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

Link to FAQs

2010 BMP 1.2 Water Loss Control

View MOU

AWWA Water Audit

Agency to complete a Water Audit & Balance Using The AWWA Software ○ Yes ○ No

Email to natalie@cuwcc.org - Worksheets (AWWA Water Audit). Enter the name of the file below:

Water Audit Validity Score from AWWA spreadsheet

Agency Completed Training In The AWWA Water Audit Method ○ Yes ○ No

Agency Completed Training In The Component Analysis Process ○ Yes ○ No

Completed/Updated the Component Analysis (at least every 4 years)? ○ Yes ○ No

Component Analysis Completed/Updated Date: 2010

Water Loss Performance

Agency Repaired All Reported Leaks & Breaks To The Extent Cost Effective ○ Yes ○ No

Recording Keeping Requirements:

Date/Time Leak Reported	Leak Location
Type of Leaking Pipe Segment or Fitting	Leak Running Time From Report to Repair
Leak Volume Estimate	Cost of Repair

Agency Located and Repaired Unreported Leaks to the Extent Cost Effective ○ Yes ○ No

Type of Program Activities Used to Detect Unreported Leaks

Leak detection methods include zone usage monitoring, zone pressure monitoring, and surface conditions. The District contracts with Utility Service Association, Inc. to conduct leak surveys where suspected excessive leakage exists.

Annual Summary Information

Complete the following table with annual summary information (required for reporting years 2-5 only)

version 1.0

2009

Total Leaks Repaired	Economic Value Of Real Loss	Economic Value Of Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken for loss reduction	Cost Of Interventions	Water Saved (AF/Year)

Comments:

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

BMP 1.3 Metering with Commodity

2010

Link to FAQs

See the complete MOU: View MOU

See the coverage requirements for this BMP:

Implementation

Does your agency have any unmetered service connections? Yes No

If YES, has your agency completed a meter retrofit plan? Yes No

Enter the number of previously unmetered accounts fitted with meters during reporting year:

Are all new service connections being metered? Yes No

Are all new service connections being billed volumetrically? Yes No

Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters? Yes No

Please Fill Out The Following Matrix

Account Type	# Metered Accounts	# Metered Accounts Read	# Metered Accounts Billed by Volume	Billing Frequency Per Year	# of estimated bills/yr
Single-Family	9,761	9,761	9,761	Bi-monthly	6
Multi-Family	120	120	120	Bi-monthly	6
Commericial	236	236	236	Bi-monthly	6
Industrial	11	11	11	Bi-monthly	6
Dedicated Irrigatic	207	207	207	Bi-monthly	6
Agricultural	4	4	4	Bi-monthly	6
Other	8	8	8	Bi-monthly	6
Other				Other	
Other				Other	
Other				Other	

Number of CII Accounts with Mixed-use Meters: 255

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period: 0

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? Yes No

If YES, please fill in the following information:

A. When was the Feasiblity Study conducted

B. Describe, upload or provide an electronic link to the Feasibility Study Upload File

File name(s): Email files to natalie@cuwcc.org

Web address(s) URL: comma-separated list

Comments:

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

CUWCC

2010

Link to FAQs

View MOU

BMP 1.4 Retail Conservation Pricing

If you are reporting more rate structures than this form allows, add the structures to a spreadsheet and send the file to natalie@cuwcc.org.

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		

Implementation Option (Conservation Pricing Option)

- ○ Use Annual Revenue As Reported
- ○ Use Canadian Water & Wastewater Association Rate Design Model

If CWWA is select, enter the file name and email the spreadsheet to natalie@cuwcc.org

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service ○ Yes ○ No

Select the Retail Waste Water(Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		

Comments:

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

Link to FAQs

2010

BMP 2.1 Public Outreach Cont'd

View MOU

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question related to your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Expense Category	Expense Amount	Personnel Costs Included?	
Regional Water Efficiency Program	$8,420	✔	If yes, check the check box.
Regional Water Efficiency Program	$164,308	✔	
SJWD - Retail	$62,886		

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of how your agency views their importance / effectiveness with respect to conserving water, with the most important/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? ○ Yes ○ No

Public Outreach Additional Information

Public Information Programs	Importance	
The Regional Water Efficiency Program designed and implemented a Community-Ba	$1	

Social Marketing Programs

Branding

Does your agency have a water conservation "brand," "theme" or mascot? ○ Yes ○ No

Describe the brand, theme or mascot.

The Regional Water Efficiency Program uses one overall brand image ("Be Water Smart") and a separate image for the current outdoor water efficiency campaign ("Blue Thumb")

Market Research

Have you sponsored or participated in market research to refine your message? ○ Yes ○ No

Market Research Topic	The Regional Water Efficiency Program conducted a statistically valid telephone survey of 600 customers about water efficiency knowledge, attitudes and behaviors; also written/online surveys of participants in the Community-Based Social Marketing (CBSM) program Blue Thumb Neighbors
Brand Message	"Be Water Smart:" use water wisely/"Blue Thumb:" use water efficiently outdoors
Brand Mission Statement	The "Be Water Smart" and "Blue Thumb" brands both encourage residents to use water efficiently at home. "Blue Thumb" focuses on water efficiency in the landscape where most water use--and water waste--occurs

Community Committees

Do you have a community conservation committee? ○ Yes ◉ No

Enter the names of the community committees: Regional Water Efficiency Public Outreach Subcommittee

Training

Training Type	# of Trainings	# of Attendees	Description of Other
Green Gardener Traini	$4	$122	The Green Gardener Training Program educates local garde

Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description
Regional Water Efficien	19920	Designed and implemented a Community-Based Social Marketing (CBSM

Partnering Programs - Partners

Name	Type of Program
☐ CLCA?	
☐ Green Building Programs?	
☐ Master Gardeners?	Maintain a Master Gardener on staff to assist customers with landscaping questions.
☐ Cooperative Extension?	Regional Water Authority provides funding for the Sacramento Cooperative Extension.
☐ Local Colleges?	
☐ Other	

☐ Retail and wholesale outlet; name(s) and type(s) of programs:

Partnering Programs - Newsletters

Number of newsletters per year

Number of customers per year

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities

The Regional Water Efficiency Program partnered with the Sacramento Municipal Utility District to publish an article in SMUD's newsletter "Connections" on the water-energy use connection. This partnership also included a joint Public Service Announcement on the water-

Conservation Gardens

Describe water conservation gardens at your agency or other high traffic areas or new

Recently expanded, this WEL Garden features an inviting entry area, varieties of flowers, groundcovers, gazebos, parking lot landscaping, fire-resistant and deer-resistant plants and an oak tree-compatible and preservation garden that contains native plants and ground cover

Landscape contests or awards

Describe water wise landscape contest or awards program conducted by your agency

Comments:

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

Link to FAQs

2010

BMP 2.2 School Education Programs, Retail Agencies

View MOU

School Programs

Is a wholesale agency implementing school programs which can be counted to help your agency comply with this BMP? ○ Yes ○ No

Enter Wholesaler Names, separated by commas: San Juan Water District - Wholesale

☐ Materials meet state education framework requirements?

Description of Materials:
- Student supplements, written by an award-winning environmental educator and edited by water agency personnel.
- Teaching materials, online Be Water Smart teacher guides and activities
- California Waterways map
- Student contests for K-4th grades and 5th-8th grades
- Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the program

☐ Materials distributed to K-6 Students?

Description of materials distributed to K-6 Students:
- Student supplements, written by an award-winning environmental educator and edited by water agency personnel.
- Teaching materials, online Be Water Smart teacher guides and activities
- California Waterways map
- K-4 will receive a class set of "Water Conservation and You booklets"
- Student contests for K-4th grades and 5th-8th grades
- Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the program

Number of students reached: 4,247

☐ Materials distributed to 7-12 Students?

Description of materials distributed to 7-12 Students: None

Number of Distribution: 0

Annual budget for school education program: $46,500.00

Description of all other water supplier education programs:
- SJWD - Wholesale sponsors a Poster contest for its retail agencies. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an assortment of gift certificates from local businesses. The teacher of each student who placed in the contest receives $100 for classroom supplies.
- SJWD - Wholesale Participated in a science fair. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an assortment of gift certificates from local businesses. The teacher of each student who placed in the contest receives $100 for classroom supplies.
- The Water Bucks Program was developed as an opportunity to educate students on the efficient use of water. In exchange for student participation in identifying

School Program Activities

Classroom presentations:

Number of presentations: 5 Number of attendees:

Large group assemblies:

Number of presentations: 1 Number of attendees: 600

Children's water festivals or other events:

Number of presentations: 1 Number of attendees: 500

Cooperative efforts with existing science/water education programs (various workshops, science fair awards or judging) and follow-up:

Number of presentations: 5 Number of attendees: 363

Other methods of disseminating information (i.e. themed age-appropriate classroom loaner kits):

Description: None

Number distributed: 0

Staffing children's booths at events & festivals:

Number of booths: 1 Number of attendees: 500

Water conservation contests such as poster and photo:

Description: • SJWD - Wholesale sponsors a Poster contest for its retail agencies. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an assortment of gift certificates from local businesses. The teacher of each student who placed in the contest receives $100 for classroom supplies.

Number distributed: 313

Offer monetary awards/funding or scholarships to students:

Number Offered: 0 Total Funding:

Teacher training workshops:

Number of presentations: 0 Number of attendees:

Fund and/or staff student field trips to treatment facilities, recycling facilities, water conservation gardens, etc.:

Number of tours or field trips: 2 Number of participants: 306

College internships in water conservation offered:

Number of internships: 0 Total funding:

Career fairs/workshops:

Number of presentations: 0 Number of attendees:

Additional program(s) supported by agency but not mentioned above:

Description: • The Water Bucks Program was developed as an opportunity to educate students on the efficient use of water. In exchange for student participation in identifying and reporting leaks and other signs of water waste, the District rebates the amount of the school's water bill (that is paid by the school district) directly back to the school. To date, the District has given back a total of more than $300,000 to the elementary schools in our service area.

Number of events (if applicable): Number of participants: 240

Total reporting period budget expenditures for school education programs (include all agency costs): 46500

Comments

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

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Link to FAQs

2010

BMP 2.1 Public Outreach Cont'd

View MOU

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question related to your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Expense Category	Expense Amount	Personnel Costs Included?	
Regional Water Efficiency Program	$8,420	✔	If yes, check the check box.
Regional Water Efficiency Program	$164,308	✔	
SJWD - Retail	$62,886		

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of how your agency views their importance / effectiveness with respect to conserving water, with the most important/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? ○ Yes ○ No

Public Outreach Additional Information

Public Information Programs	Importance	
The Regional Water Efficiency Program designed and implemented a Community-Ba	$1	

Social Marketing Programs

Branding

Does your agency have a water conservation "brand," "theme" or mascot? ○ Yes ○ No

Describe the brand, theme or mascot.

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Have you sponsored or participated in market research to refine your message? ○ Yes ○ No

Market Research Topic	The Regional Water Efficiency Program conducted a statistically valid telephone survey of 600 customers about water efficiency knowledge, attitudes and behaviors; also written/online surveys of participants in the Community-Based Social Marketing (CBSM) program Blue Thumb Neighbors
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Brand Mission Statement	The "Be Water Smart" and "Blue Thumb" brands both encourage residents to use water efficiently at home. "Blue Thumb" focuses on water efficiency in the landscape where most water use--and water waste--occurs

Community Committees

Do you have a community conservation committee? ○ Yes ◉ No

Enter the names of the community committees: Regional Water Efficiency Public Outreach Subcommittee

Training

Training Type	# of Trainings	# of Attendees	Description of Other
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Social Marketing Expenditures

Public Outreach Social Marketing Expenses

Expense Category	Expense Amount	Description
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Partnering Programs - Partners

Name	Type of Program
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☐ Green Building Programs?	
☐ Master Gardeners?	Maintain a Master Gardener on staff to assist customers with landscaping questions.
☐ Cooperative Extension?	Regional Water Authority provides funding for the Sacramento Cooperative Extension.
☐ Local Colleges?	
☐ Other	

☐ Retail and wholesale outlet; name(s) and type(s) of programs:

Partnering Programs - Newsletters

Number of newsletters per year

Number of customers per year

Partnering with Other Utilities

Describe other utilities your agency partners with, including electrical utilities

The Regional Water Efficiency Program partnered with the Sacramento Municipal Utility District to publish an article in SMUD's newsletter "Connections" on the water-energy use connection. This partnership also included a joint Public Service Announcement on the water-

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Describe water conservation gardens at your agency or other high traffic areas or new

Recently expanded, this WEL Garden features an inviting entry area, varieties of flowers, groundcovers, gazebos, parking lot landscaping, fire-resistant and deer-resistant plants and an oak tree-compatible and preservation garden that contains native plants and ground cover

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Describe water wise landscape contest or awards program conducted by your agency

Comments:

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

Click here to open a table that displays your agency name reporting unit name and reporting unit number. Please ensure that you enter the correct information.

Link to FAQs

2010

BMP 2.1 Public Outreach - Retail Reporting

View MOU

Is a Wholesale Agency Performing Public Outreach?

Are there one or more wholesale agencies performing public outreach which can be counted to help your agency comply with the BMP? ○ Yes ○ No

Enter the name(s) of the wholesale agency (comma delimited): San Juan Water District - Wholesale

Is your agency performing public outreach?

Report a minimum of 4 water conservation related contacts your agency had with the public during the year.

Public Information Programs List

Did at least one contact take place during each quarter of the reporting year? ✔

Number of Public Contacts		Public Information Programs	
7			
66,318			
30,000			
	Select a public contact		
	Select a public contact		

Contact with the Media

Are there one or more wholesale agencies performing media outreach which can be counted to help your agency comply with the BMP? ◉ Yes ◉ No

Enter the name(s) of the wholesale agency (comma delimited): San Juan Water District - Wholesale

OR Retail Agency (Contacts with the Media)

Media Contacts List

Did at least one contact take place during each quarter of the reporting year? ✔

Number of Media Contacts	Did at least one contact take place during each quarter of the reporting year?	Media Contact Types	
14	Articles or stories resulting from outreach		
9	News releases		
2	Newspaper contacts		
1	Written editorials		
	Select a type of media contact		
	Select a type of media contact		

Is a Wholesale Agency Performing Website Updates?

Did one or more CUWCC wholesale agencies agree to assume your agency's responsibility for meeting the requirements of and for CUWCC reporting of this BMP? ○ Yes ○ No

Enter the name(s) of the wholesale agency (comma delimited)

San Juan Water District - Wholesale

Is Your Agency Performing Website Updates?

Enter your agency's URL (website address): sjwd.org, rwah2o.org

Describe a minimum of four water conservation related updates to your agency's website that took place during the year:

1. 2009 and 2010- The rebate section of the www.rwah2o.org includes information about toilet, high efficiency clothes washer, smart irrigation controller, cooling tower, commercial rinse and spray valve, pressurized brooms and ice machine retrofit rebates. This section is updated annually with program date changes and at a minimum 4 times per year as rebate amounts change, agency participation changes, new programs are available, and rebate applications are updated.
2. 2009 and 2010-The Green Gardener Training Program information brochure and qualified professionals list are updated on the www.rwah2o.org website and homepage for each Green Gardener Training Program, 2 per year.
3. 2009 and 2010-The calendar of events is updated as information is provided by member agencies and stakeholders. The calendar is updated annually with the annual workshops hosted by the Sacramento Chapter UC Master Gardeners at the Fair Oaks Horticulture Center.
4. The Water-Wise Gardening gallery of plants is updated annually with new plants and watering tips.
5. 2009 and 2010-The Regional Water Efficiency Program created a new Web site (currently http://www.bewatersmart.info/blue-thumb/) for the Blue Thumb outdoor water efficiency campaign. The Web site includes the following: Home Page with overall statistics about outdoor water use (and potential savings) in the Sacramento region; case studies page with video of influencers and every-day people providing tips to others wanting to earn their Blue Thumb; and Pledge Page where visitors can identify five actions to use water efficiently outdoors and earn an incentive prize.
6. 2009 and 2010-The site is updated throughout the year with additional materials (such as audio of the program manager's interview with Farmer Fred Hoffman of KFBK and information about the region's partnership with The Home Depot). (2010)

Did at least one Website Update take place during each quarter of the reporting year? ○ Yes ○ No

Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or brake the budget into discrete categories by entering many rows. Please indicate if personnel costs are included in the entry.

Category	Amount		Personnel Costs Included? If yes, check the box.	Comments	
Regional Water E	$8,420		✔	Consultant only; February-July 2009	
Regional Water E	$164,308		✔	Consultant only,	
SJWD - Retail	$80,000			Does not include consultant costs.	

Comments:

July 2009-December 2010 (includes Blue Thumb Neighbors, also listed under "Social Marketing Expenditures")

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

Link to FAQs

View MOU

BMP 1.4 Retail Conservation Pricing

2009

If you are reporting more rate structures than this form allows, add the structures to a spreadsheet and send the file to natalie@cuwcc.org.

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		

Implementation Option (Conservation Pricing Option)

- ○ Use Annual Revenue As Reported
- ○ Use Canadian Water & Wastewater Association Rate Design Model

If CWWA is select, enter the file name and email the spreadsheet to natalie@cuwcc.org

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service ○ Yes ○ No

Select the Retail Waste Water(Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		

Comments:

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

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You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

CUWCC

2010

Link to FAQs

View MOU

BMP 1.4 Retail Conservation Pricing

If you are reporting more rate structures than this form allows, add the structures to a spreadsheet and send the file to natalie@cuwcc.org.

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		

Implementation Option (Conservation Pricing Option)

- ○ Use Annual Revenue As Reported
- ○ Use Canadian Water & Wastewater Association Rate Design Model

If CWWA is select, enter the file name and email the spreadsheet to natalie@cuwcc.org

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service ○ Yes ○ No

Select the Retail Waste Water(Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		

Comments:

The fields in red are required.

Agency name: San Juan Water District

Division name (Reporting unit): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

2010

Service Area Population:

Non- Potable Water

If you select Other for type, enter

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	

Exported Water Name	AF/YEAR	Where Exported? such as groundwater recharge, retail,

The fields in red are required.

Agency name: San Juan Water District

Division name (Reporting unit): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

Water Uses

2010

Non-Potable Billed

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					

Non-Potable Un-Billed

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					

The fields in red are required.

Agency name: San Juan Water District

Division name (Reporting unit): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

WATER SOURCES

2010

Service Area Population:

Potable Water

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Exported Water Name	AF/YEAR	Where Exported?

The fields in red are required.

Agency name: San Juan Water District

Division name (Reporting unit): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

Water Uses

2010

Potable Water Billed

Make sure to enter numbers in AF/Year.

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
	9,774.00	4,294,738.00	0.00	0.00	
	119.00	83,252.00	0.00	0.00	
Commercial	237.00	197,646.00	0.00	0.00	
Institutional	11.00	67,734.00	0.00	0.00	
Dedicated Irrigation	212.00	347,601.00	0.00	0.00	
Agricultural	4.00	8,430.00	0.00	0.00	
Other	8.00	883.00	0.00	0.00	Sewer Lift / Pump Stations
Other					
Other					
Other					
Other					
Other					
Other					

Potable Water Un-Billed

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					

AWWA WLCC Free Water Audit Software: Reporting Worksheet

WAS v4.2

Back to Instructions

? Click to access definition

Water Audit Report for: San Juan Water District - Retail
Reporting Year: 2010 1/2010 - 12/2010

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: ACRE-FEET PER YEAR

WATER SUPPLIED

<< Enter grading in column 'E'

Volume from own sources:	10	12,651	acre-ft/yr	
Master meter error adjustment (enter positive value):	7	12.651	under-registered	acre-ft/yr
Water imported:	n/a	-	acre-ft/yr	
Water exported:	n/a	0.000	acre-ft/yr	
WATER SUPPLIED:		12,663.781	acre-ft/yr	

AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

				Pcnt:	Value:
Billed metered:	9	11,513.340	acre-ft/yr		
Billed unmetered:	10	1.390	acre-ft/yr		
Unbilled metered:	10	83.130	acre-ft/yr		
Unbilled unmetered:	9	3.000	acre-ft/yr		3.000
AUTHORIZED CONSUMPTION:		11,600.860	acre-ft/yr		

Use buttons to select percentage of water supplied OR value

WATER LOSSES (Water Supplied - Authorized Consumption)		1,062.921	acre-ft/yr		
Apparent Losses				Pcnt:	Value:
Unauthorized consumption:		31.659	acre-ft/yr	0.25%	
Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed					
Customer metering inaccuracies:	9	0.012	acre-ft/yr		0.012
Systematic data handling errors:	9	0.012	acre-ft/yr		
Apparent Losses:		31.683			

Choose this option to enter a percentage of billed metered consumption. This is NOT a default value

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses:		1,031.238	acre-ft/yr
WATER LOSSES:		1,062.921	acre-ft/yr

NON-REVENUE WATER

NON-REVENUE WATER:		1,149.051	acre-ft/yr

= Total Water Loss + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	9	205.2	miles	
Number of active AND inactive service connections:	9	10,442		
Connection density:		51	conn./mile main	
Average length of customer service line:	10	30.0	ft	(pipe length between curbstop and customer meter or property boundary)
Average operating pressure:	9	50.0	psi	

COST DATA

Total annual cost of operating water system:	10	$8,032,603	$/Year
Customer retail unit cost (applied to Apparent Losses):	9	$100.00	$/100 cubic feet (ccf)
Variable production cost (applied to Real Losses):	10	$90.60	$/acre-ft

PERFORMANCE INDICATORS

Financial Indicators

Non-revenue water as percent by volume of Water Supplied:	9.1%
Non-revenue water as percent by cost of operating system:	18.4%
Annual cost of Apparent Losses:	$1,380,125
Annual cost of Real Losses:	$93,430

Operational Efficiency Indicators

Apparent Losses per service connection per day:	2.71	gallons/connection/day
Real Losses per service connection per day*:	88.17	gallons/connection/day
Real Losses per length of main per day*:	N/A	
Real Losses per service connection per day per psi pressure:	1.76	gallons/connection/day/psi
? Unavoidable Annual Real Losses (UARL):	174.82	acre-feet/year
From Above, Real Losses = Current Annual Real Losses (CARL):	1,031.24	acre-feet/year
? Infrastructure Leakage Index (ILI) [CARL/UARL]:	5.90	

* only the most applicable of these two indicators will be calculated

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 92 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Master meter error adjustment
2: Unauthorized consumption
3: Billed metered

For more information, click here to see the Grading Matrix worksheet

AWWA WLCC Free Water Audit Software: Reporting Worksheet

WAS v4.2

Back to Instructions

? Click to access definition

Water Audit Report for: San Juan Water District - Retail
Reporting Year: 2010 (1/2010 - 12/2010)

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

All volumes to be entered as: ACRE-FEET PER YEAR

WATER SUPPLIED

<< Enter grading in column 'E'

Volume from own sources:	10	12,651	acre-ft/yr	
Master meter error adjustment (enter positive value):	7	12.651	under-registered	acre-ft/yr
Water imported:	n/a	-	acre-ft/yr	
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AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

				Pcnt:	Value:
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Unbilled metered:	10	83.130	acre-ft/yr		
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AUTHORIZED CONSUMPTION:		11,600.860	acre-ft/yr		

Use buttons to select percentage of water supplied OR value

WATER LOSSES (Water Supplied - Authorized Consumption)

1,062.921 acre-ft/yr

Apparent Losses

				Pcnt:	Value:
Unauthorized consumption:		31.659	acre-ft/yr	0.25%	

Default option selected for unauthorized consumption - a grading of 5 is applied but not displayed

Customer metering inaccuracies:	9	0.012	acre-ft/yr		0.012
Systematic data handling errors:	9	0.012	acre-ft/yr		
Apparent Losses:		31.683			

Choose this option to enter a percentage of billed metered consumption. This is NOT a default value

Real Losses (Current Annual Real Losses or CARL)

Real Losses = Water Losses - Apparent Losses: 1,031.238 acre-ft/yr

WATER LOSSES: 1,062.921 acre-ft/yr

NON-REVENUE WATER

NON-REVENUE WATER: 1,149.051 acre-ft/yr

= Total Water Loss + Unbilled Metered + Unbilled Unmetered

SYSTEM DATA

Length of mains:	9	205.2	miles	
Number of active AND inactive service connections:	9	10,442		
Connection density:		51	conn./mile main	
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Total annual cost of operating water system:	10	$8,032,603	$/Year
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Variable production cost (applied to Real Losses):	10	$90.60	$/acre-ft

PERFORMANCE INDICATORS

Financial Indicators

Non-revenue water as percent by volume of Water Supplied:	9.1%
Non-revenue water as percent by cost of operating system:	18.4%
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Real Losses per service connection per day*:	88.17	gallons/connection/day
Real Losses per length of main per day*:	N/A	
Real Losses per service connection per day per psi pressure:	1.76	gallons/connection/day/psi
Unavoidable Annual Real Losses (UARL):	174.82	acre-feet/year
From Above, Real Losses = Current Annual Real Losses (CARL):	1,031.24	acre-feet/year
Infrastructure Leakage Index (ILI) [CARL/UARL]:	5.90	

* only the most applicable of these two indicators will be calculated

WATER AUDIT DATA VALIDITY SCORE:

***** YOUR SCORE IS: 92 out of 100 *****

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Master meter error adjustment
2: Unauthorized consumption
3: Billed metered

For more information, click here to see the Grading Matrix worksheet

LEGEND: X indicates agency made (brief) comment to item in Subject column	San Juan Water District
SUBJECT	
Testing Criteria & Practices	
Test Frequency -meter 1 inch or smaller -years	**N/A**
Test Frequency-meters 2-3 inch -years	**3**
Test Frequency-meters 4 inch-years	**N/A**
Test Frequency- meters greater than 4 inch -years	**N/A**
Test Frequency - Construction meters-years	**1**
High use meters - years	**X**
Test interval meter total consumption - 1.5 inch - CCF	**0**
Test interval meter total consumption - 3 to 8 inch compound - CCF	**3**
Test interval meter total consumption - 10" compound - CCF	**N/A**
Test interval meter total consumption - turbo fire hydrant - CCF	**1**
Replace meters instead of testing & repairing meters	**X**
Meter readings compared with prior customer use (billing exception reports) followed with inspection and testing if outside parameters	**X**
Test sample of new meters before field installation	**0**
Test sample of meters of different sizes and different ages to determine accuracy and need for replacement	**X**
Fire service flow detector assembly checked	**0**
Large meters tested when replaced	**0**
Reference to AWWA & manufacturers accuracy standards	**X**
Repair & Maintenance	
Base repair schedule on cumulative consumption of meter	**0**
Worn or damaged Construction meters parts replaced	**X**
Replacement Criteria	
Change out - meters 5/8 and 1 inch -years	**0**
Change out- meters1.5 and 2 inch -years	**0**
Change out- meters greater than 2 inch (includes meter chamber change instead of entire body) years	**0**
Production meters - replace propeller meters with 'Mag Meters'	**X**
Hydrant meters- replace with 3" turbo meters	**X**
Additional Replacement Criteria	
change meters based cumulative consumption	**0**
meters stuck/stopped	**X**
meter chambers recalibrated	**X**
meter test results	**X**
meter location	**0**
customer complaint	**X**
large old meters	**X**
Replace meters as needed	**X**
Provided schedule to replace old meters - meter age in years	**0**
Provided capitol budget for new meter change out	**0**
Automatic Metering Technology, X=implementation	
AMR meters being Considered	**0**
Started to Install new AMR system since 2000	**X**
Visit AMR meters at least once annually to verify meter condition	**X**
New meter system (not AMR) installation started since 2000	**0**

The fields in red are required.

Agency name: San Juan Water District

Division name (Reporting unit): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

2009

Service Area Population:

Non- Potable Water

If you select Other for type, enter

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	

Exported Water Name	AF/YEAR	Where Exported? such as groundwater recharge, retail,

The fields in red are required.

Agency name: San Juan Water District

Division name (Reporting unit): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

WATER SOURCES

Service Area Population:

2009

Potable Water

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Exported Water Name	AF/YEAR	Where Exported?

The fields in red are required.

Agency name: San Juan Water District

Division name (Reporting unit): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

Water Uses

2009

Potable Water Billed

Make sure to enter numbers in AF/Year.

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
	9,774.00	4,294,738.00	0.00	0.00	
	119.00	83,252.00	0.00	0.00	
Commercial	237.00	197,646.00	0.00	0.00	
Institutional	11.00	67,734.00	0.00	0.00	
Dedicated Irrigation	212.00	347,601.00	0.00	0.00	
Agricultural	4.00	8,430.00	0.00	0.00	
Other	8.00	883.00	0.00	0.00	Sewer Lift / Pump Stations
Other					
Other					
Other					
Other					
Other					
Other					

Potable Water Un-Billed

Customer Type	Meter Accounts	Metered Water Delivered	Un-metered Accounts	Un-metered Water Delivered	Description
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					
Other					

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

Link to FAQs

2010 BMP 1.2 Water Loss Control

View MOU

AWWA Water Audit

Agency to complete a Water Audit & Balance Using The AWWA Software ○ Yes ○ No

Email to natalie@cuwcc.org - Worksheets (AWWA Water Audit). Enter the name of the file below:

Water Audit Validity Score from AWWA spreadsheet

Agency Completed Training In The AWWA Water Audit Method ○ Yes ○ No

Agency Completed Training In The Component Analysis Process ○ Yes ○ No

Completed/Updated the Component Analysis (at least every 4 years)? ○ Yes ○ No

Component Analysis Completed/Updated Date 2010

Water Loss Performance

Agency Repaired All Reported Leaks & Breaks To The Extent Cost Effective ○ Yes ○ No

Recording Keeping Requirements:

Date/Time Leak Reported	Leak Location
Type of Leaking Pipe Segment or Fitting	Leak Running Time From Report to Repair
Leak Volume Estimate	Cost of Repair

Agency Located and Repaired Unreported Leaks to the Extent Cost Effective ○ Yes ○ No

Type of Program Activities Used to Detect Unreported Leaks

Leak detection methods include zone usage monitoring, zone pressure monitoring, and surface conditions. The District contracts with Utility Service Association, Inc. to conduct leak surveys where suspected excessive leakage exists.

Annual Summary Information

Complete the following table with annual summary information (required for reporting years 2-5 only)

Total Leaks Repaired	Economic Value Of Real Loss	Economic Value Of Apparent Loss	Miles Of System Surveyed For Leaks	Pressure Reduction Undertaken for loss reduction	Cost Of Interventions	Water Saved (AF/Year)

Comments:

version 1.0

2009

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

BMP 1.3 Metering with Commodity

2010

Link to FAQs

See the complete MOU: View MOU

See the coverage requirements for this BMP:

Implementation

Does your agency have any unmetered service connections? Yes No

If YES, has your agency completed a meter retrofit plan? Yes No

Enter the number of previously unmetered accounts fitted with meters during reporting year:

Are all new service connections being metered? Yes No

Are all new service connections being billed volumetrically? Yes No

Has your agency completed and submitted electronically to the Council a written plan, policy or program to test, repair and replace meters? Yes No

Please Fill Out The Following Matrix

Account Type	# Metered Accounts	# Metered Accounts Read	# Metered Accounts Billed by Volume	Billing Frequency Per Year	# of estimated bills/yr
Single-Family	9,761	9,761	9,761	Bi-monthly	6
Multi-Family	120	120	120	Bi-monthly	6
Commericial	236	236	236	Bi-monthly	6
Industrial	11	11	11	Bi-monthly	6
Dedicated Irrigatic	207	207	207	Bi-monthly	6
Agricultural	4	4	4	Bi-monthly	6
Other	8	8	8	Bi-monthly	6
Other				Other	
Other				Other	
Other				Other	

Number of CII Accounts with Mixed-use Meters: 255

Number of CII Accounts with Mixed-use Meters Retrofitted with Dedicated Irrigation Meters during Reporting Period: 0

Feasibility Study

Has your agency conducted a feasibility study to assess the merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters? Yes No

If YES, please fill in the following information:

A. When was the Feasiblity Study conducted

B. Describe, upload or provide an electronic link to the Feasibility Study Upload File

File name(s): Email files to natalie@cuwcc.org

Web address(s) URL: comma-separated list

Comments:

CUWCC Reporting
June 30, 2011

BMP 2.1 Public Outreach--Wholesale Reporting

Is your agency performing public outreach? YES

Did at least one contact take place during each quarter of the reporting year? YES

Public Information Programs List

Select a public contact (options) - 2009

SJWD	RWA	Item
		Newsletter articles on conservation
		Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets –
		Landscape water conservation media campaigns
5		General water conservation information
30000		Website – hits on website
		E-Mail Messages

Number of Public Contacts	Public Information Programs
Redesigned website received 30,000 hits in 12 months; average over 85 people per day	Website
Capital Improvements Newsletter	Newsletter
2009 Consumer Confidence Report	Flyers and/or Brochures

Wholesale Agency (Contacts with the Media)

Did at least one contact take place during each quarter of the reporting year? Yes.

Media Contacts List

Select a type of media contact (options)

SJWD	RWA	Item
4		Articles or stories resulting from outreach
		Editorial board visits
1		News releases
		Newspaper contacts
		Radio contacts
1		Television contacts
		Written editorials

Number of Media Contacts	Media Contacts Types
Press Release - San Juan Family of Water Agencies Issue New Conservation Stage Calling for 20 Percent Water Use Reduction to Retail Customers (Feb 2009)	News Release
Drought deepens in region - Granite Bay: The Press-Tribune Web site Viewed by more than 400 people (Posted Tuesday, February 24, 2009)	Articles or stories resulting from outreach
Drought Prompts New Water Restrictions Capital Public Radio (Aired Wednesday, February 25, 2009)	Articles or stories resulting from outreach
o San Juan Water Agencies Urge 20 Percent Water Use Reduction - Rocklin Today Web site (Posted Wednesday, February 25, 2009)	Articles or stories resulting from outreach
o Folsom, San Juan Impose More Water Restrictions - News 10 (Aired Thursday, February 25, 2009)	Television Coverage
o Folsom, San Juan Areas Order Sever Water Rationing - The Sacramento Bee (Posted Thursday, February 26, 2009)	Articles or stories resulting from outreach
Press Release – Eight Sacramento-Area Water Providers voice Concern over Senate Bill 68	News Release

Is Your Agency Performing Website Updates? Yes

Enter your agency's URL (website address):

www.sjwd.org

Describe a minimum of four water conservation related updates to your agency's website that took place during the year:

SJWD

1. Website Redesign in January. The SJWD Web site was redesigned and unveiled on Thursday, January 8 to be more up-to-date, and customer-friendly while still providing useful and important information for SJWD customers. The new Web site currently includes customer-related sections for easy access to information including: Your Water; Your Bill; Improvement projects; Water efficiency tips; Free programs and services; Customer rebates; News; Contact Us.
2. Website is updated on a monthly basis with board agendas and minutes; press releases are also posted.

Did at least one Website Update take place during each quarter of the reporting year? **YES**

Public Outreach Annual Budget

Enter budget for public outreach programs. You may enter total budget in a single line or break the budget into discrete categories by entering many rows. Please indicate if personnel costs are included in the entry.

Category	Amount	Personnel Costs Included?	Comments
SJWD Wholesale	40,000	No	

BMP 2.1 Public Outreach Cont'd

Comments:

The San Juan retail agencies are all members of the Regional Water Authority. RWA in certain respects acts as a wholesale agency for its members. RWA applies for regional grants and administers public outreach and school education campaigns that satisfy the requirements of the respective BMPs.

Public Outreach Expenses

Enter expenses for public outreach programs. Please include the same kind of expenses you included in the question related to your budget (Section 2.1.7, above). For example, if you included personnel costs in the budget entered above, be sure to include them here as well.

Expense Category	Expense Amount	Personnel Costs Included?
SJWD – Wholesale	69,125.70	No

Additional Public Information Program

Please report additional public information contacts. List these additional contacts in order of how your agency views their importance / effectiveness with respect to conserving water, with the most important/ effective listed first (where 1 = most important).

Were there additional Public Outreach efforts? **YES**

Social Marketing Programs

Branding
Does your agency have a water conservation brand, theme or mascot? **No**

Market Research

Have you sponsored or participated in market research to refine your message? Yes

Market Research Topic

The Regional Water Efficiency Program conducted a statistically valid telephone survey of 600 customers about water efficiency knowledge, attitudes and behaviors; also written/online surveys of participants in the Community-Based Social Marketing (CBSM) program Blue Thumb Neighbors

Community Committees

Do you have a community conservation committee? **Yes**

The fields in red are required.

Agency name: San Juan Water District

Division name (Reporting unit): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

2009

Service Area Population:

Non- Potable Water

If you select Other for type, enter

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	
		Select a water type.	

Exported Water Name	AF/YEAR	Where Exported? such as groundwater recharge, retail,

The fields in red are required.

Agency name: San Juan Water District

Division name (Reporting unit): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

WATER SOURCES

2009

Service Area Population:

Potable Water

Own Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Imported Supply Source Name	AF/YEAR	Water Supply Type	Water Supply Description
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	
		Other	

Exported Water Name	AF/YEAR	Where Exported?

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

Link to FAQs

View MOU

BMP 1.4 Retail Conservation Pricing

2009

If you are reporting more rate structures than this form allows, add the structures to a spreadsheet and send the file to natalie@cuwcc.org.

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		

Implementation Option (Conservation Pricing Option)

- ○ Use Annual Revenue As Reported
- ○ Use Canadian Water & Wastewater Association Rate Design Model

If CWWA is select, enter the file name and email the spreadsheet to natalie@cuwcc.org

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service ○ Yes ○ No

Select the Retail Waste Water(Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		

Comments:

The fields in red are required.

Agency name: San Juan Water District

Reporting unit name (District name): San Juan Water District - Retail

Reporting unit number: 199

Primary contact:

First name: Vicki

Last name: Sacksteder

Email: vsacksteder@sjwd.org

You must enter the reporting unit number that we have on record for your agency. Click here to open a table to obtain this number.

CUWCC

2010

Link to FAQs

View MOU

BMP 1.4 Retail Conservation Pricing

If you are reporting more rate structures than this form allows, add the structures to a spreadsheet and send the file to natalie@cuwcc.org.

Implementation (Water Rate Structure)

Enter the Water Rate Structures that are assigned to the majority of your customers, by customer class

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		

Implementation Option (Conservation Pricing Option)

- ○ Use Annual Revenue As Reported
- ○ Use Canadian Water & Wastewater Association Rate Design Model

If CWWA is select, enter the file name and email the spreadsheet to natalie@cuwcc.org

Retail Waste Water (Sewer) Rate Structure by Customer Class

Agency Provide Sewer Service ○ Yes ○ No

Select the Retail Waste Water(Sewer) Rate Structure assigned to the majority of your customers within a specific customer class.

Rate Structure	Customer Class	Total Revenue Commodity Charges	Total Revenue Customer Meter/Service (Fixed Charges)
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		
Select a Rate Struc	Other		

Comments:

APPENDIX J

CUWCC BMP Coverage Reports

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

Agency: San Juan Water District **District Name:** San Juan Water District - Retail **CUWCC Unit #:** 199
Retail

Primary Contact Vicki Sacksteder **Telephone** 916-791-6933 **Email:** vsacksteder@sjwd.org

Compliance Option Chosen By Reporting Agency:
(Traditional, Flex Track or GPCD)
GPCD if used:

GPCD in 2010	**369**
GPCD Target for 2018	409

Year	Report	Target		Highest Acceptable Bound	
		% Base	GPCD	% Base	GPCD
2010	1	96.4%	481	100%	499
2012	2	92.8%	463	96%	481
2014	3	89.2%	445	93%	463
2016	4	85.6%	427	89%	445
2018	5	82.0%	409	82%	409

Not on Track if 2010 GPCD is ≥ than target

GPCD in 2010	369
Highest Acceptable GPCD for 2010	499

On Track

Agency: San Juan Water District **District Name:** San Juan Water District - Retail **CUWCC Unit #:** 199
Retail

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

Foundational BMPs

BMP 1.1 Operational Practices

		2009	2010	
1.Conservation Coordinator provided with necessary resources to implement BMPs?	Name	Vicki Sacksteder	Vicki Sacksteder	Conservation Coordinator provided with necessary resources to implement BMPs?
	Title	Water Resources Analyst	Water Resources Analyst	
	Email	vsacksteder@sjwd.org	vsacksteder@sjw	
		On Track	On Track	
2. Water waste prevention documentation	Descriptive File	11000 Prohibited Practices.pdf		
	Descriptive File 2010		11000 Prohibited Practices.pdf	
	URL	www.sjwd.org 11000 Prohibited Practices.pdf		On Track if any one of the 6 ordinance actions done, plus documentation or links provided
	URL 2010		www.sjwd.org 11000 Prohibited Practices.pdf	
	Describe Ordinance Terms	San Juan Water District Code of Ordinances, Section 23000 District Water Conservation Program, amended August 1, 2008.		
	Describe Ordinance Terms 2010		San Juan Water District Code of Ordinances, Section 23000 District Water Conservation Program, amended August 1, 2008.	
		On Track	On Track	

Agency: San Juan Water District | District Name: San Juan Water District - Retail | CUWCC Unit #: 199
Retail

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

BMP 1.2 Water Loss Control

	2009		
Complete a prescreening Audit	Yes	On Track	On Track if Yes
Metered Sales	12,574		
Verifiable Other Uses	0		
Total Supply	13,569		
(Metered Sales + System uses)/ Total Supply >0.89	0.93	On Track	On Track if =>.89, Not on Track if No
If ratio is less than 0.9, complete a full scale Audit in 2009?	NA	On Track	On Track if Yes
Verify Data with Records on File?	Yes	On Track	On Track if Yes
Operate a system Leak Detection Program?	Yes	On Track	On Track if Yes

	2009		
Compile Standard Water Audit using AWWA Software?	Yes	On Track	On Track if Yes, Not on Track if No
AWWA file provided to CUWCC?	No		Info only until 2012
AWWA Water Audit Validity Score?			Info only until 2012
Completed Training in AWWA Audit Method?			
Completed Training in Component Analysis Process?			Info only until 2012
Complete Component Analysis?			Info only until 2012
Repaired all leaks and breaks to the extent cost effective?	Yes	On Track	On Track if Yes, Not on Track if No
Locate and repair unreported leaks to the extent cost effective.	Yes	On Track	On Track if Yes, Not on Track if No
Maintain a record-keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.			Info only until 2012
Provided 7 types of Water Loss Control Info			

Leaks Repaired	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost of Interventions	Water Saved

Info only until 2012

	2010		
Compile Standard Water Audit using AWWA Software?	Yes	On Track	On Track if Yes, Not on Track if No
AWWA file provided to CUWCC?	AWWA 2010 WaterAudit.pdf	On Track	On Track if Yes, Not on Track if No
AWWA Water Audit Validity Score?	92		Info only until 2012
Completed Training in AWWA Audit Method?	Yes		
Completed Training in Component Analysis Process?	Yes		Info only until 2012
Complete Component Analysis?	No		Info only until 2012
Repaired all leaks and breaks to the extent cost effective?	Yes	On Track	On Track if Yes, Not on Track if No
Locate and repair unreported leaks to the extent cost effective.	Yes	On Track	On Track if Yes, Not on Track if No
Maintain a record-keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.	Leak detection methods include zone usage monitoring, zone pressure monitoring, and surface conditions. The District contracts with Utility Service Association, Inc. to conduct leak surveys where suspected excessive leakage exists.		Info only until 2012
Provided 7 types of Water Loss Control Info			

Leaks Repaired	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost of Interventions	Water Saved

Info only until 2012

Agency: San Juan Water District | District Name: San Juan Water District - Retail | CUWCC Unit #: 199
Retail

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

1.3 METERING WITH COMMODITY RATES FOR ALL NEW CONNECTIONS AND RETROFIT OF EXISTING CONNECTIONS

If signed MOU prior to 31 Dec 1997, On Track if all connections metered; If signed after 31 Dec 1997, complete meter installations by 1 July 2012 or within 6 yrs of signing and 20% biannual reduction of unmetered connections.

		2009		2010		
Exemption or 'At least as Effective As' accepted by CUWCC						
Numbered Unmetered Accounts	2008	0	On Track	0	On Track	On Track if no unmetered accounts
Metered Accounts billed by volume of use		Yes	On Track	Yes	On Track	Volumetric billing required for all connections on same schedule as metering
Number of CII accounts with Mixed Use meters		255		256		Info only
Conducted a feasibility study to assess merits of a program to provide incentives to switch mixed-use accounts to dedicated landscape meters?		No		No		Info only until 2012
Feasibility Study provided to CUWCC?		No		No		Info only until 2012
Completed a written plan, policy or program to test, repair and replace meters		Yes	On Track	Yes	On Track	On Track if Yes, Not on Track if No

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

Agency: San Juan Water District **District Name:** San Juan Water District - Retail **CUWCC Unit #:** 199
Retail
Coverage Report Date: September 8, 2011

Primary Contact Vicki Sacksteder **Email:** vsacksteder@sjwd.org

1.4 Retail Conservation Pricing

Date 2009 data received #REF!
Date 2010 data received #REF!

On Track if: Increasing Block, Uniform, Allocation, Standby Service; Not on Track if otherwise

Metered Water Rate Structure

Customer Class	2009 Rate Type	Conserving Rate?	Customer Class	2010 Rate Type	Conserving Rate?
Single Family	Uniform	Yes	Single Family	Uniform	Yes
Other	Uniform	Yes	Other	Uniform	Yes
	On Track			On Track	

Year Volumetric Rates began for Agencies with some Unmetered Accounts

Info only

Agencies with Partially Metered Service Areas: If signed MOU prior to 31 Dec. 1997, implementation starts no later than 1July 2010. If signed MOU after 31 Dec. 1997, implementation starts no later than 1July 2013, or within seven years of signing the MOU,

Agency: **San Juan Water District** District Name: **San Juan Water District - Retail** CUWCC Unit #: **199**
Retail
Coverage Report Date: September 8, 2011

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

Foundation Best Management Practices for Urban Water Efficiency

Adequacy of Volumetric Rates) for Agencies with No Unmetered Accounts

Customer Class	2009 Rate Type	2009 Volumetric Revenues $1000s	2010 Rate Type	2010 Volumetric Revenues $1000s
Single Family	$2,760,875.24	$ 3,731,070	$2,692,244.40	$ 3,970,041
Other	$415,667.63	$ 547,600	$418,594.94	$ 585,916
Total Revenue Commodity Charges (V):		$ 3,177		$ 3,111
Total Revenue Fixed Charges (M):		$ 4,279		$ 4,556
Calculate: V / (V + M):		43%		41%
		Info Only untill 2011		Info Only untill 2011

Agency Choices for rates:

A) Agencies signing MOU prior to 13 June2007, implementation starts 1 July2007: On Track if (V / (V + M) ≥ 70% x .8 = **56% for 2009** and 70%x0.90 = **63% for 2010**; Not on track if (V / (V + M)) < 70%;

B) Use Canadian model. Agencies signing MOU after 13June2007, implementation starts July 1 of year following signing.

Canadian Water & Wastewater Rate Design Model Used and Provided to CUWCC	**No** Info Only untill 2011	**Yes** Info Only untill 2011
If Canadian Model is used, was 1 year or 3 year period applied?		5 year period

Wastewater Rates

	2009		2010
Does Agency Provide Sewer Service?	**No**	If 'No', then wastewater rate info not required.	**No**

Customer Class	2009 Rate Type	Conserving Rate?	Customer Class	2010 Rate Type	Conserving Rate?
		On Track			On Track

On Track if: 'Increasing Block', 'Uniform', 'based on long term marginal cost' or 'next unit of capacity'

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

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Foundation Best Management Practices for Urban Water Efficiency

BMP 2. EDUCATION PROGRAMS

BMP 2.1 Public Outreach Actions Implemented and Reported to CUWCC

	2009	2010	
Does a wholesale agency implement Public Outrach Programs for this unility's benefit?	Yes	**Yes**	Yes/No
Names of Wholesale Agencies	**San Juan Water District- Wholesale**	**San Juan Water District- Wholesale**	
1) Contacts with the public (minimum = 4 times per year)	7	6	
2) Water supplier contacts with media (minimum = 4 times per year, i.e., at least quarterly).	14	19	
3) An actively maintained website that is updated regularly (minimum = 4 times per year, i.e., at least quarterly).	Yes	Yes www.sjwd.org, www.rwah2o.org, www.bewatersmart.info	All 6 action types implemented and reported to CUWCC to be 'On Track')
4) Description of materials used to meet minimum requirement.	Articles or stories resulting from outreach Website Newspaper Contacts Written Editorials News RIeases	Articles or stories resulting from outreach Website News releases Radio contacts	
5) Annual budget for public outreach program.	$ 80,000	$ 8,420	
6) Description of all other outreach programs	The Regional Water Efficiency Program designed and implemented a Community-Based Social Marketing (CBSM) pilot project called "Blue Thumb Neighbors." The goal of this ongoing pilot project is to motivate residential water users to adopt water-efficient behaviors and reduce their water use over the long-term. After the first year of this two-year program, results include positive change in 17 of 18 key water-efficient behaviors tested and two full-scale makeovers from thirsty yards to water-efficient landscapes. July 2009-December 2010 (includes Blue Thumb	Water Efficiency Program designed and implemented a Community-Based Social Marketing (CBSM) pilot project called "Blue Thumb Neighbors." The goal of this ongoing pilot project is to motivate residential water users to adopt water-efficient behaviors and reduce their water use over the long-term. After the first year of this two-year program, results include positive In an effort to educate stakeholders about capital improvement projects and key local and regional water issues, SJWD worked with LucyCo to contact local homeowner associations and community	
	On Track	**On Track**	

CUWCC BMP RETAIL COVERAGE REPORT 2009-2010

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Foundation Best Management Practices for Urban Water Efficiency

2.2 School Education Programs Implemented and Reported to CUWCC

	2009	2010	
Does a wholesale agency implement School Education Programs for this unility's benefit?	Yes	Yes	
Name of Wholesale Supplier?	San Juan Water District - Wholesale	San Juan Water district - Wholesale	
1) Curriculum materials developed and/or provided by agency	• Student supplements, written by an award-winning environmental educator and edited by water agency personnel. • Teaching materials, online Be Water Smart teacher guides and activities • California Waterways map • Student contests for K-4th grades and 5th-8th grades • Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the program	• Student supplements, written by an award-winning environmental educator and edited by water agency personnel. • Teaching materials, online Be Water Smart teacher guides and activities • California Waterways map • Student contests for K-4th grades and 5th-8th grades • Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the program	Yes/ No
2) Materials meet state education framework requirements and are grade-level appropriate?	No	Yes	All 5 actions types implemented and reported to CUWCC to be
3) Materials Distributed to K-6?	Yes	Yes	
Describe K-6 Materials	• Student supplements, written by an award-winning environmental educator and edited by water agency personnel. • Teaching materials, online Be Water Smart teacher guides and activities • California Waterways map • K-4 will receive a class set of “Water Conservation and You booklets” • Student contests for K-4th grades and 5th-8th grades • Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the program	• Student supplements, written by an award-winning environmental educator and edited by water agency personnel. • Teaching materials, online Be Water Smart teacher guides and activities • California Waterways map • K-4 will receive a class set of “Water Conservation and You booklets” • Student contests for K-4th grades and 5th-8th grades • Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the program	Describe materials to meet minimum requirements
Materials distributed to 7-12 students?	No	No	Info Only
4) Annual budget for school education program.	$ 46,500	$ 21,500	
5) Description of all other water supplier education programs	• SJWD - Wholesale sponsors a Poster contest for its retail agencies. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an assortment of gift certificates from local businesses. The teacher of each student who placed in the contest receives $100 for classroom supplies. • SJWD - Wholesale Participated in a science fair. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an assortment of gift	• SJWD - Wholesale sponsors a Poster contest for its retail agencies. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an assortment of gift certificates from local businesses. The teacher of each student who placed in the contest receives $100 for classroom supplies.	
	See Wholesale Report	See Wholesale Report	
	On Track	On Track	

Enter District ID No.	2007

Data File Name | BASE Year | 2009WBMP1.1 | 2010 WBMP1.1 | 2009 BMP 1.2 | 2010 BMP 1.2 | 2009 BMP 1.3 | 2010 BMP 1.3

CUWCC BMP COVERAGE REPORT FOR WHOLESALE AGENCIES

Foundation Best Management Practices for Urban Water Efficiency

Agency: San Juan Water District **District Name:** San Juan Water District Wholesale **CUWCC Unit #:** 2007

Primary Contact Vicki Sacksteder **Email:** vsacksteder@sjwd.org

Base Year: Calendar or FiscalYear Reporting Report Date: 9-Sep-11

Foundational BMPs

BMP 1.1.3 Wholesale Agency Assistance Programs

Date of 2009 Data Download August 26, 2011

Date of 2010 Data Download August 28, 2011

a) Financial investments and building partnerships Value of resources provided to retailers for:	2009 Monetary Amount for Financial Incentives	2009 Monetary Amount for Equivalent Resources
2009		
Total Value of Resources	$ -	$ -

a) Financial investments and building partnerships Value of resources provided to retailers for:	2010 Monetary Amount for Financial Incentives	2010 Monetary Amount for Equivalent Resources
2010		
Total Value of Resources	$ -	$ -

"On Track" if Retailer accepted offer and Wholesaler provided resources. "Not on Track" if Retailer accepted offer and Wholesaler did not provde resources.

Agency: San Juan Water District | **District Name:** San Juan Water District Wholesale | **CUWCC Unit #:** 2007

	2009 Technical Support Description	2010 Technical Support Description	
b) Technical Support	The San Juan retail agencies are all members of the Regional Water Authority. RWA in certain respects acts as a wholesale agency for its members. RWA applies for regional grants and administers public outreach and school education campaigns that satisfy the requirements of the respective BMPs. San Juan staff attends CUWCC workshops and meetings on behalf of member agencies but San Juan has not held dedicated workshops on its own as there is no ne		" On Track" if Retailer accepted and Wholesaler provided and described Technical Support

2009		2010		
c) Retail Angency	**Programs Managed for Retailers**	**c) Retail Angency**	**Programs Managed for Retailers**	
				" On Track" if Retailer accepted and Wholesaler provided and lists programs managed for retailers

	2009		**2010**	
d) Water Shortage Allocation				
Has Water shortage plan or policy been adopted?	August 1, 2008 11000 Prohibited Practices.pdf	Adoption Date File Name	August 1,2008 1000 Prohibited Practices.pdf	"OnTrack" if plan /policy adopted and document provided. "Not on Track" if no water shortage plan or policy adopted or document not provided.
e) Non signatory Reporting of BMP implementation by non-signatory agencies				Report if possible

	List Efforts to recruit retailers		
f) Encourage CUWCC Membership List Efforts to recruit retailers	a. Canvassed California retailers statewide, regarding Council issues and promoted membership benefits. b. Promote Council membership benefits with colleagues at conferences, workshops, and other professional venues.	a. Canvassed California retailers statewide, regarding Council issues and promoted membership benefits. b. Promote Council membership benefits with colleagues at conferences, workshops, and other professional venues.	"On Track" if efforts listed or dues paid.

Agency: San Juan Water District **District Name:** San Juan Water District Wholesale **CUWCC Unit #:** 2007

BMP 1.2 Water Loss Control

Date of 2009 Data Submittal:
Date of 2010 Data Submittal:

	2009	
Complete a prescreening Audit		On Track if Yes
Metered Sales AF		Metered sales to retail agencies
Verifiable Other Uses AF		
Total Supply AF		Into wholesale system
(Metered Sales + System uses)/ Total Supply >0.89		On Track if =>.89, Not on Track if No
If ratio is less than 0.9, complete a full scale Audit in 2009?		On Track if Yes
Verify Data with Records on File?		On Track if Yes
Operate a system Leak Detection Program?		On Track if Yes

Comments

For wholesalers AWWA methodology applies to supplies to wholesalers, sales to retail agencies or sub wholesalers, and pipelines operated by wholesalers. End use retail customers are not considered in this

	2010	
Compile Standard Water Audit using AWWA Software?		On Track if Yes, Not on Track if No
AWWA file provided to CUWCC?	No	On Track if Yes, Not on Track if No
AWWA Water Audit Validity Score?	no data	Info only until 2012
Completed Training in AWWA Audit Method?		Info only until 2012
Completed Training in Component Analysis Process?		Info only until 2012
Complete Component Analysis?		Info only until 2012
Repaired all leaks and breaks to the extent cost effective?		On Track if Yes, Not on Track if No
Locate and repair unreported leaks to the extent cost effective.		On Track if Yes, Not on Track if No
Maintain a record-keeping system for the repair of reported leaks, including time of report, leak location, type of leaking pipe segment or fitting, and leak running time from report to repair.		Info only until 2012
Provided 7 types of Water Loss Control Info		info only until 2012

Leaks Repaired	Value Real Losses	Value Apparent Losses	Miles Surveyed	Press Reduction	Cost Interventions	Water Lost from Leaks AF

Agency: San Juan Water District **District Name:** San Juan Water District Wholesale **CUWCC Unit #:** 2007

1.3 METERING WITH COMMODITY RATES FOR ALL NEW CONNECTIONS AND RETROFIT OF EXISTING CONNECTIONS

Date of 2009 Data Submittal: August 26, 2011
Date of 2010 Data Submittal: #REF!

	2009	2010	
Exemption requested?	No	No	
At least as Effective As Requested?	No	No	
Does Agency have Unmetered Deliveries to Retail Agencies or Other Wholesalers?	No	NO	
Metered Accounts billed by volume of use	Yes	Yes	Volumetric billing required for all connections on same schedule as metering
Completed a written plan, policy or program to test, repair and replace meters	Yes	Yes	On Track if Yes, Not on Track if No
	On Track	On Track	

Enter District ID No.	2007	Agency Row #	136	#N/A	143	#N/A
		Data File Name	2009 BMP2.1	2010 BMP2.1	2009 BMP2.2	2010 BMP2.2

CUWCC BMP COVERAGE REPORT FOR WHOLESALE AGENCIES

Foundation Best Management Practices for Urban Water Efficiency

Agency: San Juan Water District
WHOLESALE Water Supplier

District Name: San Juan WD Wholesale

CUWCC Unit #: 2007

Coverage Report Date: September 9, 2011

Primary Contact #REF! #REF!

Email: vsacksteder@sjwd.org

BMP 2. EDUCATION PROGRAMS

date 2009 datafile downloaded: August 26, 2011
date 2010 datafile downloaded: August 28, 2011

BMP 2.1 Public Outreach Actions Implemented and Reported to CUWCC

	2009	2010
1) Contacts with the public (minimum = 4 times per year)	7	5
2) Water supplier contacts with media (minimum = 4 times per year, i.e., at least quarterly).	14	6
3) An actively maintained website that is updated regularly (minimum = 4 times per year, i.e., at least quarterly).	Yes	Yes
4) Description of materials used to meet minimum requirement.	Newsletter articles on conservation Website Articles or stories resulting from outreach News releases Newspaper contacts Written editorials	Articles or stories resulting from outreach News releases Television contacts
5) Annual budget for public outreach program.	$ 69,125	$ 40,000
6) Description of all other outreach programs	With Regional Water Authority provide Community-Based Social Marketing (CBSM) pilot project called "Blue Thumb Neighbors." to motivate residential water users to adopt long term water-efficient behaviors	The Regional Water Efficiency Program conducted a statistically valid telephone survey of 600 customers about water efficiency knowledge, attitudes and behaviors; also written/online surveys of participants in the Community-Based Social Marketing (CBSM) program Blue Thumb
	On Track for 5 Actions	On Track for 5 Actions

All 6 action types implemented and reported to CUWCC to be 'On Track')

Agency: San Juan Water District | **District Name:** San Juan WD Wholesale | **CUWCC Unit #:** 2007

WHOLESALE Water Supplier | Coverage Report Date: September 9, 2011

2.2 School Education Programs Implemented and Reported to CUWCC

date 2009 datafile downloaded: August 26, 2011

date 2010 datafile downloaded: August 28, 2011

	2009	2010	
Does this wholesale agency implement School Education Programs for Sub Wholesalers or Retail unility's benefit?	Yes	yes	
Names of Sub Wholesale and Retail Agencies benefiting from Program?	San Juan retail, Orangevale Water Co.,Citrus Heights WD, Fair Oaks WD	San Juan retail, Orangevale Water Co.,Citrus Heights WD, Fair Oaks WD	
1) Curriculum materials developed and/or provided by wholesale agency	• Student supplements, written by an award-winning environmental educator and edited by water agency personnel. • Teaching materials, online Be Water Smart teacher guides and activities • California Waterways map • Student contests for K-4th grades and 5th-8th grades • Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the	• Student supplements, written by an award-winning environmental educator and edited by water agency personnel. • Teaching materials, online Be Water Smart teacher guides and activities • California Waterways map • Student contests for K-4th grades and 5th-8th grades • Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the program	All 5 actions types implemented and reported to CUWCC to be 'On Track'
2) Materials meet state education framework requirements and are grade-level appropriate?	Yes	Yes	
3) Materials Distributed to K-6?	Yes	Yes	
Describe K-6 Materials	• Student supplements, written by an award-winning environmental educator and edited by water agency personnel. • Teaching materials, online Be Water Smart teacher guides and activities • California Waterways map • K-4 will receive a class set of “Water Conservation and You booklets” • Student contests for K-4th grades and 5th-8th grades • Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the program	• Student supplements, written by an award-winning environmental educator and edited by water agency personnel. • Teaching materials, online Be Water Smart teacher guides and activities • California Waterways map • K-4 will receive a class set of “Water Conservation and You booklets” • Student contests for K-4th grades and 5th-8th grades • Subscription to Sacramento Bee newspaper for 4 consecutive weeks for the program	Describe materials to meet minimum requirements
Materials distributed to 7-12 students?	No	No	Info Only
4) Annual budget for school education program.	$ 21,500		
5) Description of all other water supplier education programs	• SJWD - Wholesale sponsors a Poster contest for its retail agencies. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an	• SJWD - Wholesale sponsors a Poster contest for its retail agencies. 3 participants from each water agency are represented highlighted in a calendar. The winners of the contest receive Savings bonds and an	
	On Track	On Track	

APPENDIX J

Notices of District Education Programs and Services Available to Customers

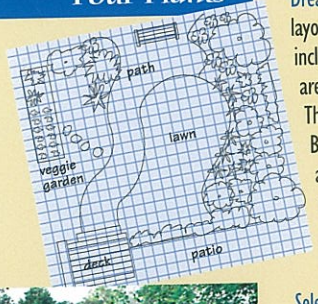
Watering Tips for Beautiful Gardens

Creating and maintaining your dream garden requires thoughtful planning, harmonious plant selection and wise watering. Wise watering means grouping plants according to their water needs. Too much water deprives plants of oxygen, causes root rot and ultimately kills them!

Group plants with similar water needs to:

- Enhance your garden's health and beauty.
- Save money by protecting your garden investment.
- Save time spent on gardening and watering.

Planning Your Garden and Grouping Your Plants



Dream and design the layout of your garden, including shady and sunny areas, slopes, drainage, etc. Then, sketch your garden. Be sure the right plants are placed according to their water, sun and soil needs and your special wants.

Select the appropriate plants for your garden before you purchase them. Use the garden wish list on this card.

Check the tags at the nursery. Read them to learn how much water the plants will need now and when they mature.

Group plants of similar water needs to create irrigation zones. Then, follow your dream garden plan.

Avoid over-watering. Establish a specific watering schedule for each zone's water needs. Check the moisture in the root zone to get it right.

Call for help. Many water providers offer free landscape irrigation advice. Call your water provider or master gardeners at (916) 875-6913 for more information.

Knowing Plant Water Needs

Your water-wise garden can include any plant you wish. Plants simply need to be grouped according to water needs.

HIGH water-use

Require frequent watering (2–3 times a week during summer months)

- Lawns
- Water-loving plants
- Container plants

MODERATE water-use

Require a little more water than low water-use plants

LOW water-use

Require little, if any, additional watering during summer months

- Many established trees and plants

NO water-use

Includes:

- Hardscapes (patios, decks, walkways)
- Established native plants that can survive on rainfall only

Get a FREE landscape irrigation review or home water efficiency kit by calling your water provider! A water efficiency expert will visit your home to:*

- review your water use and suggest ways to increase efficiency
- help check for leaks inside and outside
- provide water-saving devices, such as low-flow faucet aerators, showerheads and hose nozzles

*Services may vary.

Garden Wish List

Planning is the first step to creating a beautiful, water-efficient garden. Use the chart below to list the plants you'd like to purchase along with their water needs.

Plant name	Water needs: Low	Medium	High
1	☐	☐	☐
2	☐	☐	☐
3	☐	☐	☐
4	☐	☐	☐
5	☐	☐	☐
6	☐	☐	☐
7	☐	☐	☐
8	☐	☐	☐
9	☐	☐	☐
10	☐	☐	☐
11	☐	☐	☐

Notes:

For more information about water-efficient gardening, contact the UC COOP Extension Master Gardeners at (916) 875-6913.

RWA

This information is brought to you by:

Citrus Heights Water District	(916) 725-6873
City of Folsom Water Utilities	(916) 355-7252
City of Roseville Environmental Utilities	(916) 774-5761
Fair Oaks Water District	(916) 967-5002
Orange Vale Water Company	(916) 988-1693
San Juan Water District	(916) 791-6932

CAPITAL NURSERY CO.

Coupon Certificate

This certificate entitles

20% DISCOUNT On Any 5 Gal. or 15 Gal. Shrub or Tree

to San Juan Water District Customers

Water Education Team

Authorized by

December 30, 2009

Expires

ARMSTRONG ARDEN CAPITAL NURSERY CO. CN

CAPITAL NURSERY
5410 Sunrise Blvd.,
Citrus Heights 961-9100

1 Shrub or Tree Per Coupon
Not redeemable for cash.

EWING

Coupon Certificate

This certificate entitles 20% DISCOUNT On Irrigation Supplies

to **San Juan Water District Customers**

Ewing Irrigation

Ewing Irrigation
3265 Swetzer Road
Loomis CA 95650
916.652.9530

Water Education Team

Authorized by

December 30, 2009

Expires

Fax # 916.652.9533
Web: www.ewingl.com

Not redeemable for cash.

Discount on suggested retail price.

NORMAC

COUPON CERTIFICATE

This certificate entitles Special Pricing for Irrigation Supplies

Authorized by Water Education Team

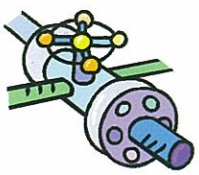
Expires December 30, 2009

Not redeemable for cash.

NORMAC

4311 Anthony Court #900.
Rocklin, CA 95677
916-652-5827 Fax916-652-5820

to San Juan Water District Customers



5 Herb Garden

Herbs are a great addition to any garden; they add beauty to the landscape and flavor to your cooking. Take a look at our demonstration herb garden for examples of which varieties are ideal for growing in our region.

6 Perennial Garden

Here you'll find a variety of beautiful perennials. These lovely plants — like other sections of the WEL Garden — are grouped according to their water needs. Those that need more water are grouped together, as are those that need less water.

7 Shade Garden

The cooling effect of shade can make even a sweltering summer afternoon refreshing and enjoyable when spent in the garden. Our shade garden includes a number of shade trees, as well as shade-loving plants that flourish with little sun.

8 Deer-Resistant Garden

In Granite Bay and other areas of the foothills, deer are often a nuisance because they eat plants and shrubs in residential gardens. The district's deer-resistant garden demonstrates a number of ways to prevent deer from making a meal of your hard work.

9 Bulb Garden

Bulbs such as tulips, daffodils and hyacinths provide a splash of color and an element of beauty to any landscape. Stroll through our bulb garden for a glimpse of several varieties. Like other sections of the WEL Garden, these plants are grouped according to their water needs.

Landscape Tip

In addition to knowing the water needs of your plants, get to know how much sun they need to help you determine the proper area of your garden for each plant. A water-loving plant, for example, will generally do well in a shady area because there is less evaporation. Also, determine how large the mature plant will become. You don't want to place a plant that will grow tall under the branches of a tree.

Develop a chart similar to the one below to analyze the needs of the plants in your garden:

Plant Name	Water Needs				Sun Needs			Mature Plant Size	Notes
	No	Low	Mod	High	Full sun	Partial sun	Shade		

San Juan Water

San Juan Water District
Water Efficient Landscape Garden
9935 Auburn-Folsom Road
Granite Bay, CA 95746
(916) 791-0115
www.sjwd.org

Hours
Open to the public
from 8:30 a.m. to 5 p.m.,
Monday through Friday,
free of charge.

Printed on recycled paper. Each ton of recycled paper saves 7,000 gallons of water.

San Juan Water District's

New Water Efficient Landscape Garden

Picturesque

Beautiful

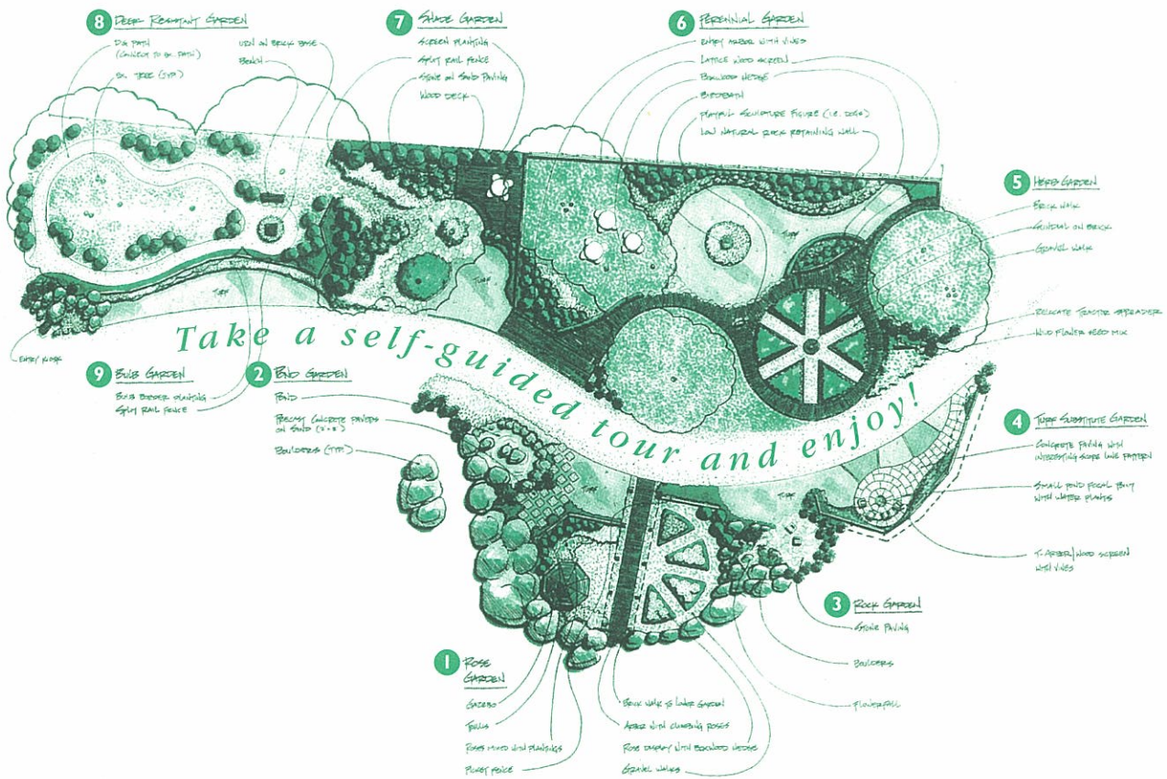
Flourishing

Green

Serene

San Juan Water District's Water Efficient Landscape (WEL) Garden is a living example of how beautiful a low-maintenance, water efficient landscape can be. If you are planning a new garden, looking to improve your existing landscape, or would simply like to enjoy some peace and quiet in a beautiful setting, come stroll through our garden.

Established in 1992, the 86,444 square-foot WEL Garden features a fruit orchard, parking lot and median landscaping, and an oak tree-compatible garden. The newly renovated portion of the garden, located directly behind the district's offices, includes a variety of demonstration gardens featuring water efficient elements and native plants and grasses. As you will see, this area of the garden has information that will help you get started on your own landscape, with scattered seating so you can sit and think about your plans!



Hardscape: A Water Efficient Choice

Replacing thirsty turf grass with hardscape is an ideal alternative for high-traffic areas and entertainment areas, or for reducing the maintenance of your landscape. Hardscape elements can be quite beautiful, too. Consider the following methods for developing an attractive hardscape area in your garden.

- Use stepping stones, natural rock pavers or bricks to add variety.
- Accent your hardscape with large pots filled with colorful perennials. (See our perennial garden for ideas!)
- Add a seating area to make your deck or patio an outdoor "room" for entertaining.

1 Rose Garden

Roses come in many beautiful shapes and sizes. By integrating features such as patios or gazebos, similar to the one featured in our rose garden, you can reduce the water needs of your thirsty rose garden.

2 Pond Garden

Believe it or not, ponds can be water efficient. Ours features a sturdy liner to prevent leaking, a re-circulating pump so the same water is used over and over again, and helpful plants and fish that naturally clean the water, which eliminates or reduces the need for toxic chemicals.

3 Rock Garden

When it comes to saving water in your landscape, nothing beats incorporating hardscape features. Our rock garden demonstrates one way to add those hardscape elements without compromising the beauty of the garden.

4 Turf Substitute Garden

Another example of hardscape elements, our turf substitute garden shows how you can create an inviting and attractive landscape with features such as patios, walkways or decks. Adding such features instead of water-loving lawns can create an ideal gathering place.

Grouping Plants

Knowing the water needs of your plants and then placing them in the appropriate area of your garden makes landscape maintenance and efficient watering easier. Take note of the water needs of your garden and consider "zoning" or grouping them according to those needs. Keep in mind that even plants that will eventually survive on rainfall alone need regular watering at first to get established.

High water-use zone: Includes lawns and water-loving plants.

Moderate water-use zone: Includes plants that need regular moisture; the soil shouldn't be too dry or too wet.

Low water-use zone: Many established plants and trees that require very little water, if any. In general, a soaking every two or three weeks is adequate.

No water-use zone: Hardscapes and established native plants that can survive on rainfall only and don't need any supplemental watering.

San Juan Water District

IMPORTANT INFORMATION FOR NEW CUSTOMERS

Delivering high quality water and providing top customer service are our highest priorities!

WELCOME TO SAN JUAN WATER DISTRICT!

We would like to take this opportunity to welcome you as a new San Juan Water District customer! Our goal is to provide our customers with the highest quality drinking water and excellence in customer service.

You will experience personal, friendly service from our helpful staff members each time you visit or call our office. When you contact us by phone, you will be greeted with a live voice, not an automated message center. That's the San Juan Water District touch.

Our office is located at 9935 Auburn Folsom Road in Granite Bay. We are open Monday through Friday from 8:30 a.m. to 5 p.m. If you have an emergency after hours, our answering service will take your call and immediately forward your message to an on-call representative who will assist you.

San Juan Water District also offers a variety of free programs and services to help you with using water more efficiently inside and outside your home. Please take a moment to read through the following information. If you have any questions, please contact us directly at (916) 791-0115. We look forward to your call.

Again, welcome to the community and our district!

San Juan Water District Staff

San Juan Water

COMPLIMENTARY SERVICES AND PROGRAMS

San Juan Water District is required to comply with the California Urban Water Conservation Council's 14 Best Management Practices (BMP), which are programs designed to increase efficient water use. As part of meeting the BMP requirements, we offer the following free programs and services to help ensure a reliable, long-term water supply and save our customers money!

Resource Center

Before you purchase a book or video about landscaping your yard, be sure to stop by our resource center. Our resource center offers pamphlets, brochures and guides about landscape care, low-water use plants, irrigation systems, efficient water use, seasonal information, plus much more. You are also welcome to borrow how-to landscape books and videos. Stop by, call us or check our web site at www.sjwd.org for a list of the available materials.

Water Efficient Landscape Garden

Are you making plans for a new garden? If so, come visit our Water Efficient Landscape Garden. Located behind our office, the WEL Garden is filled with beautiful, low-water use plants, trees, groundcovers and shrubs. The garden will provide you with ideas about alternative, low maintenance landscape designs and water efficient irrigation techniques that can be easily applied to your yard. Entry to the WEL Garden is free and is open to the public Monday through Friday, 8:30 a.m. to 5 p.m.

Landscape Expert

If you're having problems with your existing landscape, we can help! Available upon request, our landscape expert, who is also a Master Gardener, will visit your home to consult with you about your landscape, soil and irrigation needs. You will also receive valuable tips about water efficient landscaping.

Landscape Irrigation Review

Our staff has been trained to perform landscape irrigation reviews by the California Department of Water Resources and California Polytechnic State University. Upon request, a certified staff member will visit your home to evaluate your irrigation system and soil composition. Using a computer program, we can design an optimum watering schedule for your landscape's individual specifications. This free service usually results in a more healthy landscape that is water efficient and could save you money. The landscape irrigation review takes approximately one to three hours and is offered spring through fall.

Educational Workshops

We offer a variety of hands-on workshops to teach our customers about techniques for maintaining their yard. Workshop topics include fruit tree pruning, composting, and irrigation. Watch for details about these workshops and other upcoming events in our bi-monthly *Water Gram* newsletter.

Residential Retrofit

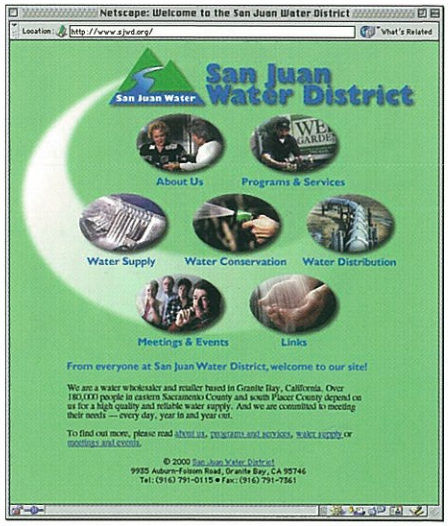
If your home was built before 1992, we will provide you with free water saving devices that are easy to install and will perform effectively. Pre-1992 homes typically do not feature the modern water efficient devices that are available today. If you are interested in upgrading your home to feature water saving devices, please call to request low-flow shower heads, toilet tummies, kitchen and bathroom sink aerators and toilet tank dye tablets (to test for leaks).

Toilet Rebates

Are you replacing a toilet? We offer up to a $75 rebate to all customers who replace a 3.5 gallon per flush or larger toilet with a 1.6 gallon per flush toilet.

New Oaks Project

This community service project was developed to aid in the restoration of the oak woodlands within our community. With help from youth groups, thousands of acorns have been planted on site and later transplanted within our community. Watch for details in our bi-monthly *Water Gram* newsletter about our annual planting event held in late fall.



Web Site

We're online to assist you! We recently revised our web site to provide you with more information about our programs and services, your water supply and important tips about using water efficiently. Visit us at www.sjwd.org

Board of Director Meetings

The San Juan Water District Board of Directors meets on the second and fourth Wednesday of each month at 7 p.m. Our meetings are open to the public and take place in the San Juan Water District's board room.

SAN JUAN WATER DISTRICT IMPORTANT NUMBERS

The following are important phone numbers to assist you in transitioning to our community.

Water Service

San Juan Water District
(916) 791-0115

Conservation Programs and Services

(916) 791-2663

Garbage Pickup

Auburn Placer Disposal Service
(530) 885-3735

Sacramento County
(916) 875-5555

City of Folsom
(916) 355-7272

Electric and/or Gas

Placer County Customers:
Pacific Gas & Electric
(800) 743-5000

Sacramento County Customers:
SMUD (888) 742-7683

Sewer Service

Placer County Special District Division (530) 889-7505

Sacramento County (916) 855-8555

City of Folsom (916) 355-7272

School Districts

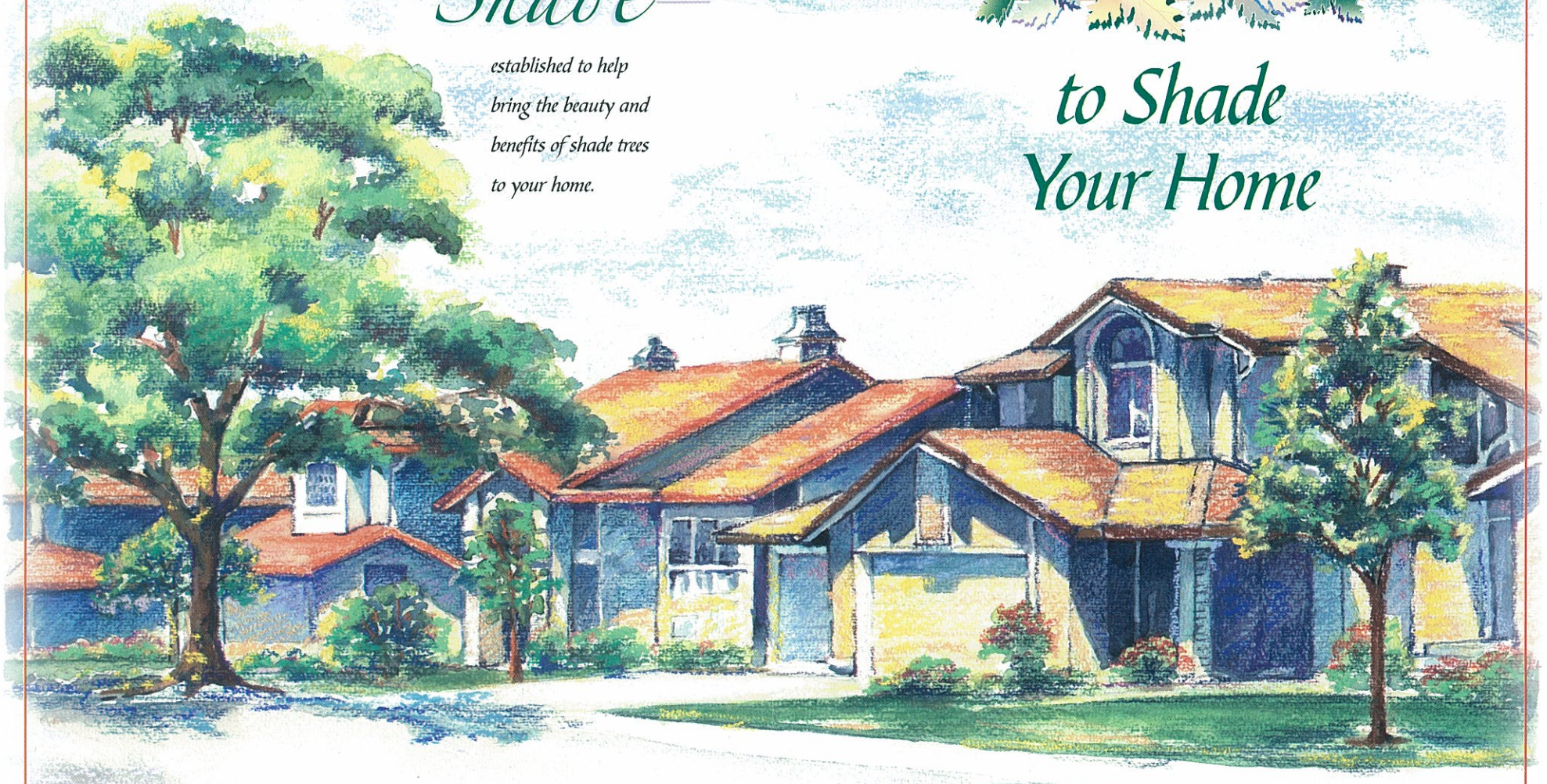
Placer County Customers:
Eureka Unified (916) 791-4939

Sacramento County Customers:
San Juan Unified (916) 971-7700
Folsom Unified (916) 355-1100

Sacramento Shade—

established to help bring the beauty and benefits of shade trees to your home.

Plant a Tree to Shade Your Home



SACRAMENTO TREE FOUNDATION

SMUD
SACRAMENTO MUNICIPAL UTILITY DISTRICT
The Power To Do More.®

SMUD
SACRAMENTO MUNICIPAL UTILITY DISTRICT
The Power To Do More.®

Plant Today . . . for Shade Tomorrow

Shade Your Home with Free Trees from SMUD

If your home has an eastern, western, or southern exposure that heats up during the summer, you may be eligible to receive free trees from SMUD – your local electric service.

The Tree Team

Since 1990, SMUD, in collaboration with the Sacramento Tree Foundation, has planted more than 350,000 shade trees in the Sacramento area. We provide expert advice on tree selection and planting techniques, and healthy trees from 4' to 7' tall, along with stakes, ties, fertilizer, and tree delivery- at no cost to you. All you do is promise to plant your trees according to the guidelines and care for the trees.

Trees Save Energy

Trees cool your home naturally. Trees properly selected, planted, and cared for can begin to reduce your home cooling costs within a few years. Fully grown and properly placed, trees can cut your home cooling costs by up to 40%.

It's More Than Just a Shade Tree

Trees add beauty and grace to your neighborhood. They add value to your property. Trees produce oxygen and help cleanse the air we breathe. Leaves capture rainwater. Roots help clean rainwater and add stability to the soil. Trees also provide a habitat for birds, squirrels and insects (and children).

It's Easy to Get Your Free Shade Trees!

1. Call SMUD for your free tree planting video or DVD to learn about planting and caring for your trees, or watch the video online at www.smud.org.
2. A Sacramento Tree Foundation Community Forester will visit your yard to help you choose the best trees and locations for shading and cooling your home.
3. Then, your free trees, stakes, ties, and fertilizer will be delivered to your front door – usually within 10 days. If you plant and care for them, your trees will begin to provide shade for your home within a few years.

Tree Choices

All of the available trees are deciduous, so they shed their leaves in the fall to allow the warm winter sun into your home. More than 25 tree species have been chosen specifically for the Sacramento region. Some of the most popular trees are: Red Maple, London Plane, Tupelo, Pistache, Linden, Goldenrain, and various species of Oak, Birch, and Maple. Specific information regarding which trees are currently available will be provided by your Community Forester and is also available at www.smud.org.

To get your free shade trees, contact SMUD.

1-888-742-SMUD (7683)

www.smud.org.

Water-Wise Gardening

In The Gold Country Region

Looking to install beautiful, low-maintenance landscaping
that won't bust your budget?
A world of ideas ... just a few mouse clicks away.

www.rwah2o.org

- Garden tours
- Garden gallery
- Search by plant names, characteristics
- Plant lists and information
- Problem solving
- Garden resource section
- Water conservation tips

Be WATER SMART
Regional Water Authority

WaterGram

San Juan Water

March/April 2009

Conditions at Folsom Lake as of November 2008

FOLSOM LAKE AT 25% OF CAPACITY

District Declares Water Warning!

Everyone must reduce their water use now to minimize the amount of future rationing.

California is in the midst of an "EXTREME DROUGHT" as defined by the Department of Water Resources. Now in the third straight year of drought conditions, Folsom Lake – our ONLY water source – cannot meet our normal water needs. At the end of January, the storage in Folsom Lake was only 25 percent of its total capacity and the Sierra snowpack was only about 60 percent of normal for this time of year.

Water Warning Guidelines

It is important that you follow these guidelines to reduce your water use by 11-25 percent:

- Use water for beneficial purposes only; unnecessary and wasteful use is prohibited.
- Confine water to your property; do not allow run-off to adjoining properties, ditches or gutters.
- Do not overwater your lawn; your lawn should show stress this year.
- Install and use automatic shut-off devices on hoses.
- Repair leaking pipes or faulty sprinklers within two days or less.
- Pools, spas and ornamental fountains or ponds must be equipped with a recirculation pump; only drain or refill pools for health, maintenance or structural reasons.
- Do not wash streets, parking lots, driveways, sidewalks or buildings, except when necessary for health or sanitary purposes.
- Take advantage of the District's free conservation programs and rebates.
- Reduce landscape and pasture irrigation by 11 – 25 percent. Do not water your lawn until warmer weather and the lawn starts to show stress.
- Set "smart" irrigation timers or controllers to achieve 75 to 89 percent of the evapotranspiration (ET) rate.
- Reduce indoor water use by 11 – 25 percent by washing full loads of clothes and dishes, taking shorter showers, turning off the tap while brushing teeth, etc.
- Restaurants shall serve water only upon request.
- Construction meters and fire hydrant meters will be monitored for efficient water use.

Did You Know?

Up to 60 percent of the state's water is contained in the Sierra snowpack.

This Water Warning requires mandatory reduction in water use. Should the water supply outlook worsen, SJWD will be required to reduce total water use by at least 20 percent, leading to mandatory water use restrictions.

WE'RE HERE TO HELP!

Take advantage of our FREE programs and services designed to help you use water efficiently. Check out our redesigned Web site – sjwd.org for more information.

Attend an Irrigation Workshop

Join us for a free irrigation workshop to improve your system's performance and to learn how to use water efficiently. The workshops are always well attended, so please call 791-2663 to reserve your spot.

Saturday, April 18
9 a.m. to noon

SJWD
9935 Auburn Folsom Road
Granite Bay

Recent Attendee Feedback

"Great workshop! Very practical and informative."

"I can't wait to implement the things I learned."

"The staff explained things very clearly and also went over the services that SJWD provides."

Conditions at Folsom Lake as of November 2008

Are You Ready for Spring?

Get a jump-start on using water efficiently with these easy tips. They will help you save money on your water bill and protect our water supply. Thank you for your continued efforts!

Did you know that most residential water use occurs outdoors? Our data indicates that last year water use during June and July was nearly six times greater than water use during December and January!

Prepare Irrigation Equipment

- Install an evapotranspiration (ET) or weather-based irrigation controller to ensure optimum watering schedules.
- Utilize rotor sprinklers to ensure even water distribution (never mix rotor and impact sprinklers in the same zone).
- Split irrigation into two short cycles allowing water to penetrate the soil and reduce runoff.

Spruce up Your Landscape

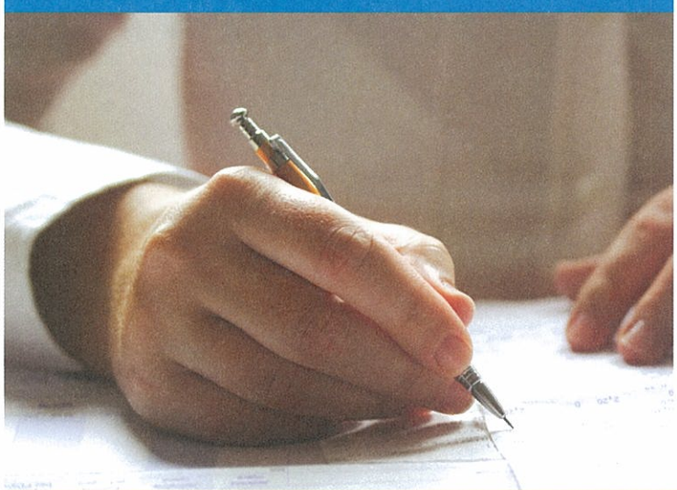
- Apply mulch to plants and shrubs to keep soil cool and reduce evaporation.
- Install drought-tolerant landscaping.
- Keep grass longer. Longer grass shades root systems and holds soil moisture better than shorter grass.
- Group plants and shrubs together based on water needs.

Use Water Wisely

- Complete outdoor watering between midnight and noon when less water evaporates.
- Avoid watering on windy days when much of the water blows away from your lawn.
- Water only when needed. Check soil moisture by pushing a screwdriver into your lawn at various locations. If it goes in easily, there is no need to water because the ground is still moist.
- Use a broom instead of the water hose for cleaning sidewalks and driveways.

Capital Improvements

A few of our recent capital improvement projects may have disrupted neighborhoods and traffic flow. We apologize for the inconvenience and thank you for your patience and understanding as we upgrade your water system!



Apply for Rebates

Are you planning to upgrade an appliance or irrigation device to a more efficient model? If so, contact us prior to purchasing to see if you qualify to receive money back. Our rebates (ranging from $100-$500 for residential and from $100-$1,500 for non-residential) are available on a first-come, first-served basis for:

- Ultra-low-flush and high-efficiency toilets
- High-efficiency washing machines
- Irrigation system upgrades
- Hot water recirculation systems

For more information, please contact us at 791-2663 or visit sjwd.org. Remember to call first to make sure the equipment you are interested in qualifies for a rebate BEFORE purchasing and installing.

Our rebate programs are partially funded by the U.S. Bureau of Reclamation and the South Placer Wastewater Authority. And, through a partnership with the Regional Water Authority, we also receive funding from the Department of Water Resources and the Sacramento Regional County Sanitation District.

Service Box Reminder

Please keep your service box area clear of all trees and shrubs and avoid covering them with bark, rock or other decorative material. Service boxes should be visible at all times. In the event of an emergency, District staff will need to easily locate your service box and promptly turn off your water to help you avoid costly repairs from water damage.

When planting trees or shrubs, please plant them at least 10 feet away from service boxes and pipelines to avoid damage caused by roots.

New Web Site Up and Running

Be sure to visit our recently updated Web site – sjwd.org. You'll find information about using water efficiently, customer rebates, bill payment options, free programs and services and more.

Sign up for equalized payment plans to take the sting out of high summer bills. Learn more on our Web site sjwd.org or call 791-0115.

San Juan Water District
P.O. Box 2157
9935 Auburn-Folsom Road
Granite Bay, CA 95746
791-0115
sjwd.org

WaterGram

San Juan Water

September/October 2008

Stage 2 Water Alert Still in Effect

Due to drought conditions and water supply cutbacks, we recently issued a Stage 2 water alert requesting customers to reduce their water use by 5 to 10 percent. Although hot, drier months are nearly behind us, we ask that you continue to follow the Stage 2 water alert and use your water efficiently.

Thank you for using water efficiently!

We're here to help. Contact us at 791-2663 or visit sjwd.org.

What This Means to You

- Stage 2 water alert raises water supply shortage awareness and encourages voluntary water use reductions.
- Immediate water needs will be met this year because of SJWD's planning. However, if dry conditions continue, long-term water supplies could be affected.

Ways to Help:

★ If you water outdoors for 10 minutes, reduce irrigation schedules to 9 minutes (or less).

★ Add mulch around your trees and shrubs to reduce watering needs; mulch helps soil retain moisture.

★ Keep grass longer – longer grass shades root systems, promotes moisture retention and requires less water.

★ Check for and fix leaky pipes, toilets and faucets.

★ Use low-flow showerheads and toilets.

★ Run washing machines and dishwashers only when full.

Steps We Take to Ensure Your Water Supply

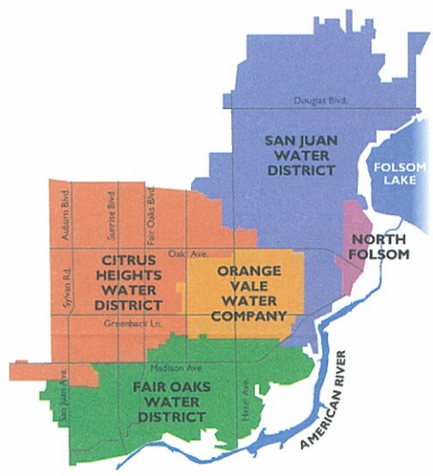
- We offer free programs and services to help you use water efficiently.
- During water shortages, we follow a dry year water supply plan developed by the San Juan Family of Water Agencies. As part of this plan, we use supplemental groundwater supplies to compensate for surface water shortages.
- We strive to protect your water rights by working closely with the U.S. Bureau of Reclamation (USBR).

Water Supply Facts

- SJWD obtains 100 percent of its water supply from Folsom Lake.
- Reduced Sierra snowmelt and rainfall have left Folsom Lake at minimum levels.
- 2008 was the driest spring on record for California.
- This summer, the U.S. Bureau of Reclamation cut water supplies to local water agencies by 25 percent.
- Because only a small portion of SJWD's water supply is from USBR Central Valley Project water, SJWD's overall reduction was less than many other regional water suppliers. SJWD's retail cutback was five percent.
- In additional to using water controlled by the USBR, SJWD also has its own water rights and has a contract with Placer County Water Agency (PCWA).

"Thank you for being so conscientious during this dry time, and please continue to use water efficiently throughout the fall months. It's important that we plan ahead – keeping in mind that our water supply could decline further if the dry weather persists."

— Shauna Lorance, General Manager



Did you know...

The San Juan Family of Water Agencies consists of San Juan retail service area, Fair Oaks Water District, Citrus Heights Water District, the Orange Vale Water Company and City of Folsom (north of the American River).

Upcoming Rate Change

The San Juan Board of Directors recently approved a nine percent customer rate increase. The rate change will go into effect in the January/February billing cycle.

Payment Options

- Online bill payment
- Electronic funds transfer
- Credit card payments
- Check by phone
- Equalized payment plan

Rate Increase Factors

While SJWD works hard to keep increases to a minimum, at times we need to increase billing rates to meet the increased costs of doing business. Necessary rate increases help:

- Fund upcoming Capital Improvement Projects (CIPs) that will ensure our facilities are up-to-date and reliable for decades to come.
- Cover continued rising costs of SJWD's water supply.
- Support the advanced drought planning fund.
- Address inflationary costs such as increased concrete, steel and costs for water treatment.
- Repay debts associated with the Capital Improvement Projects (CIPs).

Keeping Water Rates to a Minimum

SJWD has saved well over $100,000 over the past 12 months with these and other efficient strategies:

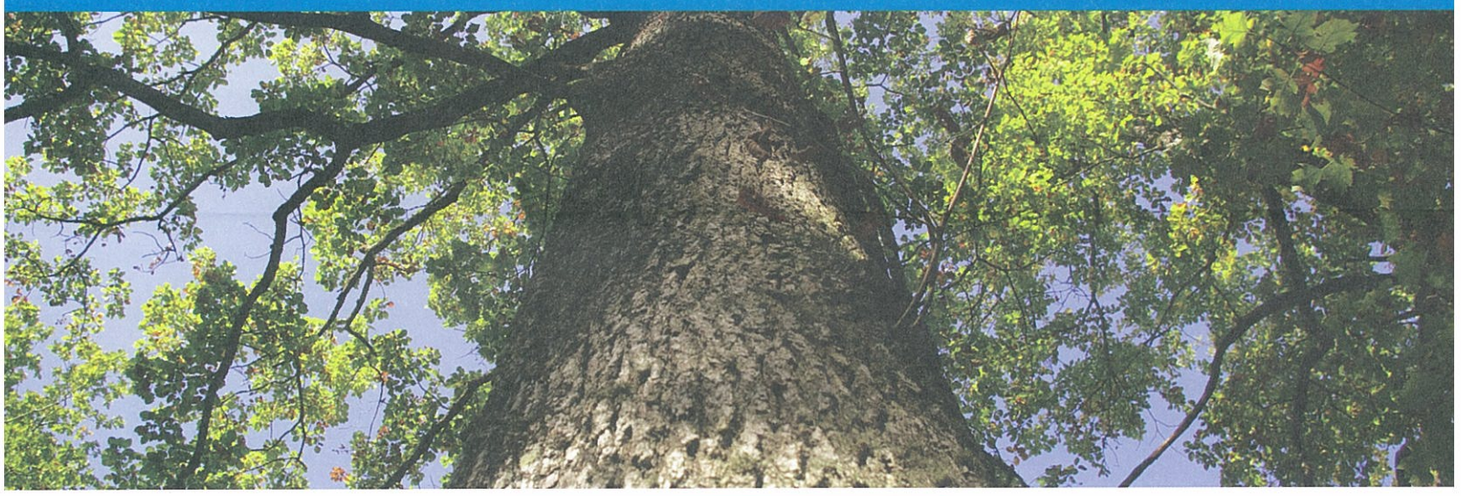
- Reduced dependency on temporary staff and consultants.
- Completed large projects in-house, such as the Information Technology Master Plan and multiple construction and design projects.
- Designed energy efficient distribution system upgrades.
- Enhanced and standardized information technology.
- Consolidated two information technology positions.
- Maintained staffing numbers below 1980's level, despite expanded duties and an increased the customer base.

SAVE WITH REBATES

• Ultra-Low-Flow Toilets • High-Efficiency Toilets and Clothes Washers • Hot Water On-Demand Systems

Call 791-2663 to make sure your planned upgrades qualify for a rebate before purchasing and installing any equipment.

Did you know...SJWD irrigation experts will provide you with free recommendations for improving the efficiency of your irrigation system.



Fall Landscaping Tips

The early bird conserves ...

- Water between midnight and noon when temperatures and wind speeds are the lowest. This will reduce loss from evaporation.
- Split irrigation into two shorter cycles to allow water to penetrate soil and reduce runoff.

Be weather aware...

- Decrease watering time when it is humid, cool or rainy.
- Adjust automatic sprinklers settings if rainfall has been sufficient for your yard's needs.
- Use a rain sensor - an inexpensive, easy-to-install, effective water conservation tool.

Pavement doesn't require water ...

- Position sprinklers so water only hits your yard.
- Avoid watering driveways and sidewalks.
- Use a broom, instead of a hose, to collect leaves and lawn clippings.

Irrigation System Rebates Available

Efficient irrigation systems can help you save on your monthly water bill, use water efficiently and enhance your landscape. If you're planning to update your system, contact us about our rebate program before you get started or buy equipment. We'll not only thank you, we'll pay you!

Qualifying customers can be reimbursed for up to 50 percent of their total material costs.

- Up to $500 for residential customers
- Up to $1,500 for nonresidential customers

Making a Move?

Before moving, please notify us so we can take a final reading of your meter for accurate billing purposes.

New SJWD Entrance

For your safety, the District has closed the facility's north entrance. Please access the facility through the south entrance at the stop light along Auburn Folsom Road. A payment drop box is also located at the south entrance. We look forward to seeing you soon!

San Juan Water District
P.O. Box 2157
9935 Auburn-Folsom Road
Granite Bay, CA 95746
791-0115
www.sjwd.org

WaterGram

San Juan Water

July/August 2008

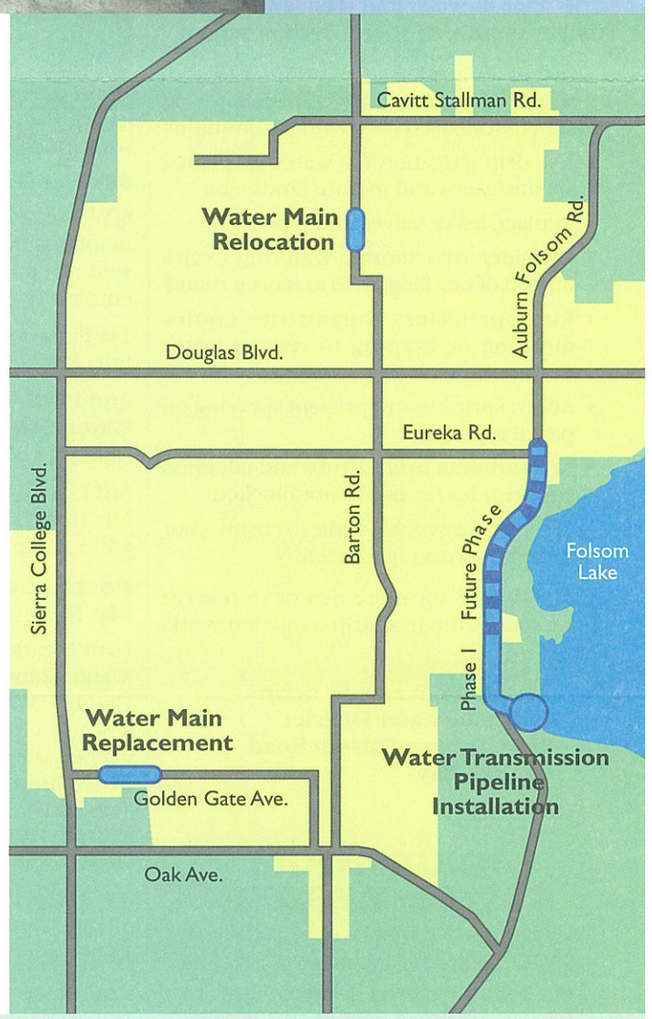
Your Water Bill at Work: Capital Improvement Projects Update

Inside This Issue

COMPLETED EARLY & UNDER BUDGET — The District completed the Golden Gate Avenue **water main replacement** in late May, almost two weeks early! Construction costs were much less than anticipated, so the District saved money and has a more efficient system. The project replaced a leaking, old steel water main built in the 1960s.

RIGHT ON SCHEDULE — In early May, SJWD began working on its **water transmission pipeline installation** project along Auburn-Folsom Boulevard. The construction work is coordinated with Placer County's roadwork, saving you money. The pipeline is the first step to providing enhanced fire protection and emergency backup water supplies for the majority of the District's Placer County customers. The second phase is slated to begin in 2009 or 2010.

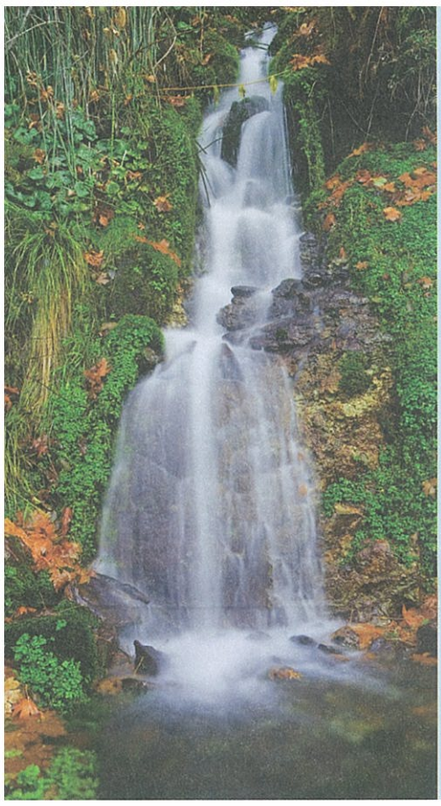
GETTING GOING — You may see SJWD working alongside Placer County construction crews during the Barton Road bridge and **water main relocation** project. Coordinating with the County is just one way the District works to save you money. The project will improve the reliability of the water supply system to areas north of the creek and remove an old pipe from a designated salmon habitat. It is scheduled for October completion.



District Awarded $50,000 Grant

THE DISTRICT IS ALWAYS LOOKING for ways to help customers improve water efficiency. Our largest programs are the rebate programs, which offer rebates ranging from $75-500.

In order to support the rebate program and other water efficiency efforts, the District applies for grants. This year, the District received $50,000 from the Bureau of Reclamation. The grant will fund washing machine and irrigation improvement rebates. It will also help fund the replacement of an older, leaking District pipe.



Continue to Save Water!

IN RESPONSE TO A LIGHT SNOW PACK AND BELOW AVERAGE RAINFALL, SJWD INSTITUTED a voluntary Stage 2–Water Alert in May. The District plans for dry years and has sufficient water supply, but issued the Stage 2–Water Alert as a reminder for you to think before you turn on the tap.

The District continuously operates under a Stage 1–Normal Water Supply and thanks our customers for following these important water-saving measures:

- Use water for beneficial purposes only
- Confine water to your property
- Don't use free-flowing hoses
- Repair leaking pipes or faulty sprinklers within five working days
- Drain and refill pools for health, maintenance or structural reasons only
- Use a broom instead of a hose to clean concrete surfaces
- Take advantage of SJWD's conservation programs and rebates

Stage 2–Water Alerts expand water conservation measures by adding two additional measures:

- Reduce landscape and pasture irrigation by 5-10 percent
- Reduce indoor water use by 5-10 percent

The District will monitor construction meters and fire hydrant meters for efficient water use.

For additional information regarding the District's water supply and tips for water efficiency measures, please call 791-2663 or visit **sjwd.org**.

Save Water & Money—Improve Your Irrigation System

YOU CAN SAVE HUNDREDS OF GALlons of water and reduce your water bill by improving your irrigation system.

- Install an evapotranspiration (ET) controller to automatically adjust watering schedules based on weather conditions
- Use drip irrigation for watering plants, shrubs, trees and mature landscape
- Replace leaky valves and pipes
- Consider two shorter watering cycles instead of one long cycle to reduce runoff
- Run sprinklers during the cooler morning or evening to reduce water evaporation
- Adjust sprinklers to prevent spraying on paved surfaces
- Trim groundcover, shrubs and tall grass so sprinkler heads are not blocked
- Modify other components to ensure your system is working efficiently

Call 791-2663 for more tips or to reserve your spot at the free drip irrigation workshop.

August 16, 9 a.m. to noon
San Juan Water District
9935 Auburn-Folsom Road
Granite Bay

IRRIGATION SYSTEM REBATES

Updating your irrigation system? Call SJWD before buying materials to find out if the upgraded equipment qualifies for a rebate. If you meet the established criteria, SJWD will conduct an irrigation review. You may be eligible for reimbursement of up to 50 percent of your total material costs (up to $500). Call 791-2663 before you get started for more information.

Student Involvement

Julia Haff, First Place Science Fair Winner

Nicole Sims, First Place Poster Contest Winner

Science Fair

SJWD recently marked its 12th year of participating in the Cavitt Junior High School science fair by judging water themed entries. The winning projects were:

1st Place – "Bottle or Tap"
Julia Haff - $100 Savings Bond

2nd Place – "Urban Impact on Water Quality"
Hailey Goulart - $75 Savings Bond

3rd Place – "Testing the American River"
Mia Hendricks & Sami Sebesta - $50 Savings Bond each

Poster Contest – My Role in Saving Water

For 17 years, SJWD along with Orange Vale Water Company and Fair Oaks and Citrus Heights Water Districts, has sponsored a water-efficiency poster contest. Each agency selects three students' posters to be featured in a water awareness calendar. The 2008 calendars are free and available at the SJWD office. This year's winners from SJWD were:

1st Place – $100 Savings Bond
Nicole Sims, Mr. Frei's 5th Grade Class, Ridgeview Elementary School

2nd Place – $75 Savings Bond
Haley Byam, Mr. Peterson's 6th Grade Class, Eureka Elementary School

3rd Place – $25 Savings Bond
Taylor Vizzusi, Mr. Maloney's 6th Grade Class, Eureka Elementary School

In addition to the savings bonds awarded to students, SJWD also makes a cash donation so teachers can purchase classroom supplies.

Water pipe in easement damaged by roots

Easement on Your Property?

IF YOU HAVE A WATER LINE EASEment on your property, avoid building any permanent structures (patios, walls or heavy sculptures) or planting trees or bushes in the easement. If emergency or necessary maintenance work is required, SJWD may need to remove the structure or plants and will not be responsible for the repair or replacement costs.

SJWD has obtained many easements for pipelines over the years and we want to alert homeowners of the restrictions on their land and potential costs associated with repair or replacement.

Not sure if you have an easement? Call SJWD at 791-0115 before any outdoor construction.

Call USA at (800) 227-2600 to have any potential utility alignments marked before any outdoor construction.

San Juan Water District
P.O. Box 2157
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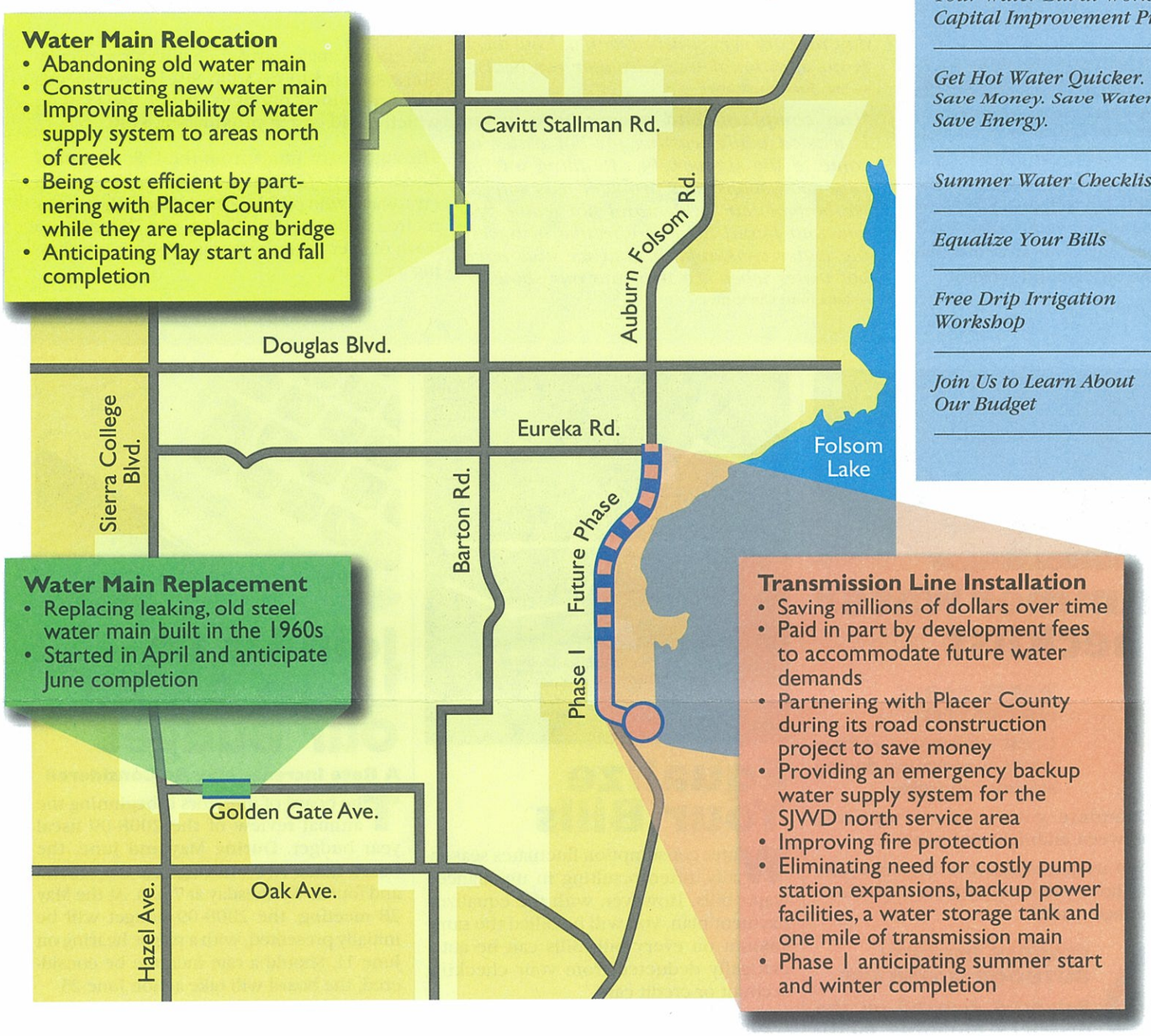
WaterGram

San Juan Water

May/June 2008

Your Water Bill at Work: Capital Improvement Projects



Inside This Issue

Capital Improvements At a Glance

San Juan is working on several large capital improvement projects, commonly called CIPs. Some are repairs or enhancements to existing facilities and others are new projects. They will ensure you and your family continue to receive high quality water and have a reliable water supply.

An independent engineering analysis, conducted by West Yost Engineering, determined what CIPs are needed and which should be implemented first. The CIPs are paid for by grant funding, new development and customer water rates. New development fees, not existing customer's bills, pay for expansion of facilities to meet future water demands.

To minimize costs and hassle for our customers, San Juan coordinates with other agencies that are planning construction projects in the same location. For example, an important, large water pipeline is being installed as part of the upcoming Auburn Folsom Road widening.

Behind the Scenes: CIP at the water treatment plant...

Beginning this summer, SJWD will update the existing chlorine disinfection system at the treatment plant to ensure the system meets regulatory requirements. The new improvements ensure the continued secure operation of the chlorine disinfection system.

DID YOU KNOW?

A water main is a pipeline that brings water into a neighborhood. Homes, businesses and fire hydrants are connected to water service lines.

A transmission main is a larger pipe than a water main. It sends water to storage tanks and water mains within the district's service area. Transmission mains usually do not have any house water service lines connected to it.

Get Hot Water Quicker. Save Money. Save Water. Save Energy.

Hot water recirculation systems save water and money.

"After comparing our January 2007 bill to January 2008, we found our water usage was 30 percent lower after installing the on-demand system!"

"For years, we had been bothered by the length of time it took to get hot water to our shower. It was clearly a waste of water to leave it running. I had thought about an on-demand system for several years but had balked at the cost. However, with the SJWD rebate program, it was more attractive to purchase one, so I made an online purchase and installed it. We use it every day, and are very satisfied with it. Now there is no additional wasted water (or heat)."
— San Juan Customer

"Our complaint had always been water is wasted while waiting for hot water to come to the shower. In attending one of your workshops, this problem was solved. We bought our on-demand hot water system and found it to be effective in lowering water consumption and we now have hot water when we step into our shower."
— San Juan Customer

While several hot water recirculation systems are on the market, SJWD staff are most familiar with the D'MAND System (available at **gothotwater.com**). The D'MAND System sends the cool water holding in hot water lines back to the water heater. At the same time, it pumps hot water directly from the heater to the fixture, reducing the wait for hot water.

The approximate cost for a hot water recirculation system is $400 to $600. SJWD recommends that a qualified plumber install the system, which could cost approximately $100.

Through grant funds from the U.S. Bureau of Reclamation, SJWD offers a rebate up to $100 to customers who purchase and install a hot water recirculation system. Please call 791-2663 to learn of specific requirements before purchasing a system.

Summer Water Checklist

WATER EARLY, NOT OFTEN

Great options to reduce water evaporation during summer months:

- ☑ Complete your outdoor watering between midnight and noon.
- ☑ Split irrigation into two shorter cycles to allow water to penetrate the soil and reduce runoff.

STAGGER INDOOR/ OUTDOOR WATER USE

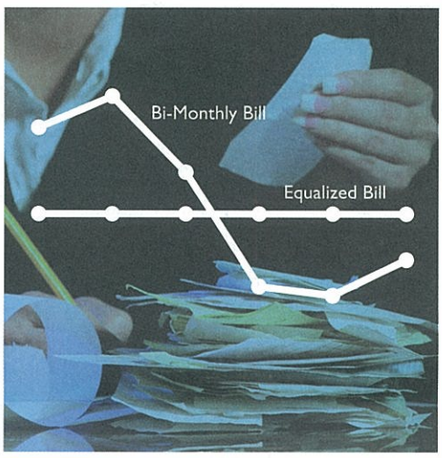
Balanced demand on the district's pumping facilities reduces energy use and increases pump station reliability and fire-fighting capabilities:

- ☑ Set your irrigation timers to run when you typically do not use water indoors. This will also provide you more volume for showers and other water-using appliances.
- ☑ Time sprinkler systems to run when your neighbors' systems are not.

TUNE UP YOUR IRRIGATION SYSTEM

To ensure efficient and cost-effective irrigation:

- ☑ Check your irrigation system for leaks, clogs or misdirected sprinklers and emitters; fix what's necessary.
- ☑ Reset your irrigation timers each season to prevent watering longer than necessary.
- ☑ Use an evapotranspiration (ET) or weather-based irrigation controller to help increase outdoor water efficiency. (Call us at 791-2663 for more information.)



Equalize Your Bills

Water consumption fluctuates seasonally, often resulting in unbalanced water bills. However, with the equalized payment plan, you will be billed the same amount on every bill. Bills can be automatically deducted from your checking account or credit card.

If you are currently on an equalized plan, your bill will be reconciled in May or June, depending on your billing month. Your bill will show the amount due or, if there is a credit, it will be reworked into your new equalized amount. For more information, please call 791-0115 or visit **sjwd.org**.

Save Some Dollars

Check out **sjwd.org** to learn about great money saving opportunities.

Free Drip Irrigation Workshop

Attend a free drip irrigation workshop to learn how to improve your existing system or install a new one.

June 21, 9 a.m. to noon
San Juan Water District
9935 Auburn-Folsom Road, Granite Bay

Join Us to Learn About Our Budget

A Rate Increase May Be Considered

The board of directors is beginning the annual review of the 2008-09 fiscal year budget. During May and June, the board holds two meetings on the second and fourth Wednesday at 7 p.m. At the May 28 meeting, the 2008-09 budget will be initially presented, with a public hearing on June 11. Should a rate increase be considered, the board will take action June 25.

Please note: due to the printing and distribution schedule necessary for Water Gram, we can't include details in this issue about the proposed 2008-09 budget. For an update, please call 791-0115 or attend a board meeting.

Board meetings are scheduled for the second Wednesday of each month at 7 p.m. at the SJWD office. An extra board meeting will be held on the fourth Wednesday in May and June. Please attend a board meeting to learn more about the water district and its services.

San Juan Water District
P.O. Box 2157
9935 Auburn-Folsom Road
Granite Bay, CA 95746
(916) 791-0115
www.sjwd.org

WaterGram

San Juan Water

January/February 2008

Enter to Win a Water-Efficient Garden Makeover

In This Issue

IN PARTNERSHIP WITH THE REGIONAL WATER AUTHORITY and other water providers in the Sacramento region, SJWD will be participating in the Ultimate "Water Smart" Garden Makeover Contest again in 2008 and invites you to enter for your chance at a water smart front yard makeover. Watch for details in upcoming Water Grams. We will also post information on our Web site as it becomes available.

The 2007 winner, a Folsom homeowner, has a brand new front yard compliments of the Ultimate "Water Smart" Garden Makeover Contest sponsored by the Regional Water Authority (RWA). Their new front yard, valued at $40,000, incorporates water-wise gardening concepts into the landscape.

Changes in Your February/ March Water Bill

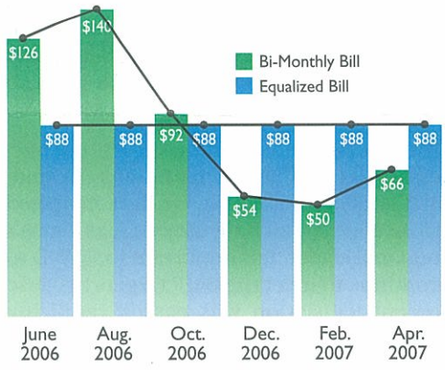
AS YOU MAY ALREADY KNOW, an outside engineering firm evaluated San Juan Water District's water distribution system and found that many of our facilities are approaching the end of their useful lives. The board-approved rate change went into effect on January 1. This rate increase will fund the necessary improvements planned for 2008 so that we can continue to provide reliable service and high quality water.

Over the next several years, the district will continue to make improvements and repairs to the system. Facilities will be replaced in an order of priority as recommended by the engineering study while at the same time striving to keep rates as low as possible.

About two percent of the rate change will be used to plan for potential water shortages and emergency outages. The district is working with neighboring districts to identify back-up water supplies for drought or emergency scenarios.

If you have questions about your bill, please call (916) 791-0115.

Your bill will be prorated so that you are billed at the old rate through December 31 and at the new rate starting January 1.



Balance Seasonal Water Bills

ENJOY CONSISTENT WATER BILLS throughout the year by taking advantage of the district's equalized payment plan.

Water consumption can fluctuate seasonally, resulting in unbalanced water bills. However, with the equalized payment plan, you will be billed the same amount on every two-month water bill. The billed amount is determined by calculating a 12-month average of your bills based on previous consumption. The district will revisit the equalized billed amount annually in May or June (depending on your billing month) and adjust the amount as necessary.

For more information, please call the district at (916) 791-0115 or visit **www.sjwd.org**.

Drought Preparation

STATE WATER EXPERTS PREDICT that 2008 will be a dry year and have urged local water utilities to take necessary measures for a possible drought. SJWD will closely assess possible water availability issues and will update the Web site as needed. For additional information, please call (916) 791-0115.

Customer Opinion Survey

THANK YOU TO THE HUNDREDS OF SJWD CUSTOMers who participated in the recently completed phone survey. We understand that surveys take time and we appreciate your cooperation to help us serve you better.

The customer opinion survey was conducted by an independent market research firm that specializes in telephone surveys. The firm used its expansive database to randomly dial phone numbers within the SJWD service area; the district did not provide any customer contact information.

Overall, participants reported that SJWD is doing well. The next Water Gram issue will provide a more detailed review of the results.

For those of you who received multiple calls, we are very sorry for the inconvenience. A programming error by the market research firm temporarily caused multiple calls. Again, we apologize.

Comments/Questions?

YOU DON'T HAVE TO WAIT FOR PHONE SURVEYS TO PROVIDE SAN JUAN Water District your feedback because we always welcome it. You can complete a customer satisfaction survey online, send an e-mail to **jgagnier@sjwd.org** or call (916) 791-0115. To help us respond promptly to your questions or comments, please be sure to include your name, address and a telephone number so we can reach you if follow up is required. Thank you!

A Necessary Fee for Late Payments

EACH MONTH, WE DELIVER 150 TO 250 past due notices to customers. To recover the additional administrative and operational costs associated with delivering late notices, SJWD applies a $15 late payment fee when a notice is delivered. If your water is shut off, there is a $30 fee to reconnect.

Ideally, penalties would never need to be assessed. However, the late payment and reconnect fees help ensure that the follow-up costs are paid by those responsible and not passed on to all of our customers.

Avoid Late Fees with Simple Payment Options

SJWD offers free bill payment options to make it easy to pay on time:

- **Pay your bill online:** The online bill pay option is now available on our Web site! Log on to **www.sjwd.org** to pay by check or credit card.
- **Electronic Funds Transfer (EFT):** Have your payments automatically deducted directly from your bank account.
- **Credit card payments:** We accept Visa and MasterCard, and you can sign up to have the amount of your bill automatically charged to your credit card each billing cycle. You can also call us to make a credit card payment over the phone.
- **Equalized payment plan:** Under this plan, you will be charged the same amount on every bill. Your equalized bill amount is an average based on your past 12 months' water usage.

Applications for bill payment options and the equalized payment plan are available online at **www.sjwd.org** or you may request an application by calling (916) 791-0115.

What Are Best Management Practices?

BEST MANAGEMENT PRACTICES (BMP), mandated by state and federal agencies, require water providers to follow established guidelines that result in more efficient use or conservation of water.

BMP participation is an expensive, but necessary, part of SJWD operations. Despite SJWD's size and budget, we have managed to meet nearly all BMP targets, making us a regional leader. It is important for SJWD to continue to meet the BMP targets because recent legislation was passed requiring water agencies to meet established BMPs or risk losing potential state grants. In addition, our federal water contract requires compliance with the BMPs as a condition to receiving surface water through federal facilities, such as Folsom Dam.

Be assured, SJWD is committed to meeting the BMPs and is working to plan for future budgetary needs.

SJWD is committed to the following BMPs:

- Residential water surveys
- Plumbing retrofit kits
- Distribution system water audits
- Customer connection metering
- Landscape water audits
- Water budgets for customers with dedicated irrigation meters
- High efficiency washing machine rebates
- Public education about water use efficiency
- Water use efficiency promotion with schools
- Commercial water use surveys
- Wholesale assistance to SJWD family agencies
- Conservation rate structure
- Conservation coordinator employment to facilitate programs
- Water waste ordinance adoption and enforcement
- Low flush toilet rebates

Take Advantage of Money Saving Opportunities!

PLANNING TO RENOVATE YOUR bathroom? Want to replace your washing machine? We may be able to help with costs!

At SJWD, helping customers find simple ways to use water efficiently is a priority. That's why we have several rebates available to customers who install water efficient equipment and appliances in and around their homes. We offer the following rebates:

- **Irrigation improvement reimbursement program** (up to $500)*
- **Hot water re-circulation system rebate** (up to $100)*
- **Washing machine rebate** (up to $100)*
- **Toilet rebate** (up to $150 for residential ultra-low flush toilets (ULF), up to $175 for residential high-efficiency toilets (HET), up to $200 for commercial toilets)**

If you need advice or assistance reviewing your water use, schedule an appointment for a water survey. Our staff will work with you to identify areas of efficiency around your home and make suggestions for improvement.

Before you purchase equipment or appliances, call to make sure it qualifies for a rebate! For more information and a complete list of services, visit **www.sjwd.org/ProgramsAndResources.htm** or call (916) 791-2663.

* Rebates made available through funding from the U.S. Bureau of Reclamation.

** Rebates made available by the district and through partnerships with the Regional Water Authority, the Sacramento Regional County Sanitation District and the South Placer Wastewater Authority.

NOTE: To qualify for rebates (other than the toilet replacement), customers must agree to a free indoor water audit or a free landscape irrigation review by certified SJWD staff before any improvements are made. Call (916) 791-2663 to schedule. Toilet rebates do not require an indoor water audit.

Mark Your Calendar!

ATTEND A FREE DRIP IRRIGATION workshop to learn how to improve your existing system or install a new one.

When: Saturday, February 23
9 a.m. to noon

Where: SJWD, 9935 Auburn-Folsom Road
Granite Bay

San Juan Water District
P.O. Box 2157
9935 Auburn-Folsom Road
Granite Bay, CA 95746
(916) 791-0115
www.sjwd.org

Commercial Water Efficiency Programs

Businesses and the communities they serve depend on clean, reliable water to grow and prosper. As rising water demands continue to strain our limited resources, it's increasingly important to support your community and lower your utility costs by incorporating water-efficiency practices into daily operations. Now is the perfect time to start saving water and money by contacting us about the programs and rebates available.

San Juan Water District
9935 Auburn Folsom Road
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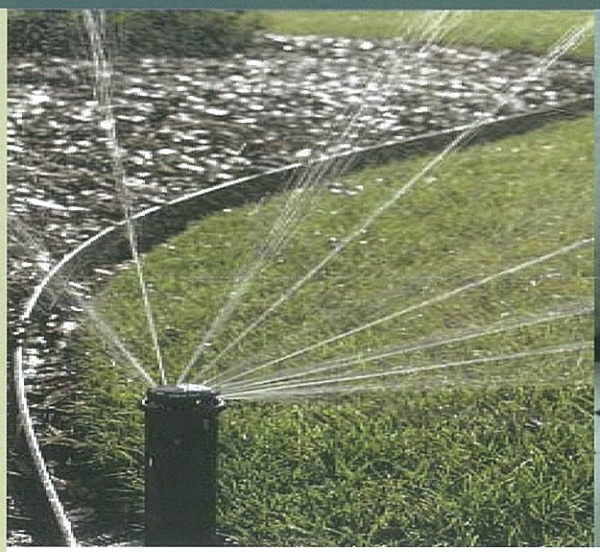
916-791-2663
www.sjwd.org

San Juan Water



We offer many FREE programs and generous rebates to San Juan Water District commercial customers.

FREE Water-Use Reviews

We'll perform a thorough assessment of your business to identify inefficiencies, both indoor and out, and make recommendations for improvement.

Irrigation Efficiency Rebate

Customers can take advantage of savings by upgrading their irrigation systems. Reimbursements include up to 50% off total material costs **(up to $1,500)** for customers who meet the established criteria.

Toilet Rebates

Receive up to **$200** per toilet when you replace older (pre-1994), non-conserving toilets or urinals with new high efficiency or low-flush models.

FREE Plumbing Retrofits

If your place of business was constructed before 1994, we can offer you low flow devices that help you save water, including low-flow showerheads, faucet aerators, toilet flapper replacements, and toilet leak-detection tablets.

Call us today for more information about our programs and rebates.

We offer similar programs and rebates to residential customers.

Residential Water Efficiency Programs

Those of us who call Northern California home must be especially aware of the ways we use water. Drought is always a possibility and the water available must support a growing population, yet continue providing a healthy environment for native fish, plants and wildlife. To balance our water supply against ever-increasing demands, we must all look for ways we can reduce unnecessary use. San Juan Water District strives to meet that need by constantly improving our operational processes and by creating programs that help you save water and care for the environment.

San Juan Water District
9935 Auburn Folsom Road
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916-791-2663
www.sjwd.org

San Juan Water

We offer many FREE programs and generous rebates to San Juan Water District residential customers.

FREE Water-Use Reviews
We'll perform a thorough assessment of your home to identify inefficiencies, both indoor and out, and make recommendations for improvement.

Irrigation Efficiency Rebate
Take advantage of savings by upgrading your irrigation system. Reimbursements include up to 50% off total material costs **(up to $500)** for customers who meet the established criteria.

Toilet Rebates
Receive up to **$175** per toilet when you replace older (pre-1994), non-conserving toilets with a new high efficiency model or up to **$125** per toilet when you replace with a low-flush model.

Hot Water Recirculation System Rebate
Customers who purchase and install a District approved hot water recirculating system can receive a **$100** rebate.

High Efficiency Washing Machine Rebate
Customers who purchase and install a high-efficiency washing machine may be eligible to receive a **$100** rebate

FREE Plumbing Retrofit Devices
If your home was constructed before 1994, we can offer you low flow devices that help you save water, including low-flow showerheads, faucet aerators, toilet flapper replacements, and toilet leak-detection tablets.

Call us today or visit www.sjwd.org for program details or to download an application today!

Step 4: Hire the right professional

4

You don't really purchase a landscape. You buy the services of a landscape contractor to install and construct the project you want. A successful relationship between you and your landscape contractor may last as long as it takes to build your project, or may span years, as your tastes change and your landscapes expand.

Although there are no guarantees when it comes to hiring a professional, here are a few steps you can take to ensure that your landscaping experience fulfills your desires.

- Get referrals from friends and neighbors who have landscaping you admire, or from the landscape architect who developed your plans.
- Contact the California Landscape Contractors Association at (916) 830-2780 for a list of landscape professionals in your area. Ask for the brochure "How To Hire A Landscape Contractor." Or, visit the landscape contractor search engine on their web site, www.clca.org/membersearch.
- In the phone book, look for professionals who identify themselves with the sign of success — the CLCA logo.

CLCA™

Provided as a service of the
California Landscape
Contractors Association
1491 River Park Drive, Suite 100
Sacramento, California 95815
916 • 830-2780
916 • 830-2788 fax
hq@clca.org

call us, or visit our website www.clca.org for a referral to a Landscape Contractor.

about **The California Landscape Contractors Association**

The California Landscape Contractors Association is the nation's oldest and largest organization of licensed landscape and landscape speciality contractors. Although formal incorporation as a non-profit trade group came in 1952, CLCA can trace its origins to 1937, to a loosely-knit group with humble beginnings in the San Francisco Bay Area. Through its 18 state-wide chapters, the association fosters professional development and the sharing of information of mutual interests, so that members may further the industry and remain current with technological changes and standards.

Four Steps To A Professional Landscape

Are you interested in transforming your yard into an enchanting garden, recreational play land or relaxing get away ?

Want to know more ?

Want to LANDSCAPE your property, but UNSURE how to do it? Whether it's your first home or your dream home, here's 4 STEPS you can take to ensure that your NEW LANDSCAPE exceeds your needs and meets your DREAMS:

1 Define Your Landscape Needs,

2 Consider Your Budget,

3 Design Your Dream, and

4 Select A Landscape Contractor.

Step 1: Define your landscape needs

1 Why Are You Landscaping?

To increase your property value? To enhance your enjoyment of your property? To save energy or water? To provide a safe environment for your children or pets? The first step toward a professional landscape is to clearly identify what purposes the landscape must serve.

Points To Consider:

- What outdoor activities will your landscape support? Nurturing a personal green thumb in a rose garden? Entertaining boisterous children?
- Do you have a desired style or theme? Are you seeking an English garden or a new age respite? Does your dream landscape match the architectural styles of nearby buildings?
- What features do you desire? Play areas, water efficiency, an outdoor kitchen, ponds and waterfalls?
- What materials are best? Do you like the granite look, roaring water or subdued floral elegance?

Step 2: Consider your budget

2

Honestly consider the amount of money available to meet your needs. The cost of your project will varying, depending on:

- The overall size of the area to be landscaped,
- The features to be included,
- The state of the current terrain, and
- The choices you make regarding materials, details and level of craftsmanship.

Step 3: Consider who will design your landscape

Your Choices Include:

- A Landscape Architect.
  A professional licensed by the state of California who can develop plans that can be put out to bid by landscape contractors.
- A Design/Build Landscape Contractor.
  A professional licensed by the state of California who can design — and then create — your landscape.
- Landscape Designers.
  Unlicensed individuals which provide ideas, conceptual plans and planting plans.

3

Your Landscape Professional

A Checklist Of Qualifications

The art and technology of landscape construction and management includes all improvements to a property with the exception of the primary building itself. A landscape firm may coordinate many specialties to create your landscape, including:

- Clearing and grading the land,
- Ensuring that there is proper and adequate drainage,
- Constructing hardscapes such as decks, patios, masonry walls, rockscapes, water features, paving and other creative effects,
- Installing and managing irrigation systems,
- Creating interiorscapes and specialty gardens,
- Installing lighting for safety and enjoyment,
- Selecting and planting everything from the most delicate of flowers to massive trees,
- Managing your garden to promote a healthy environment, and
- Auditing water to eliminate waste.

Specialities ...

Landscape contractors have the knowledge and experience to provide a wide arrangement of construction specialties in one or more of the following areas:

- Residential construction
- Residential maintenance
- Commercial construction
- Commercial maintenance
- Public works
- Design and Build

Provided as a service of the

CLCA

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Sacramento, California 95815
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Call us, or visit our website (www.clca.org) for a referral to a Landscape Contractor.

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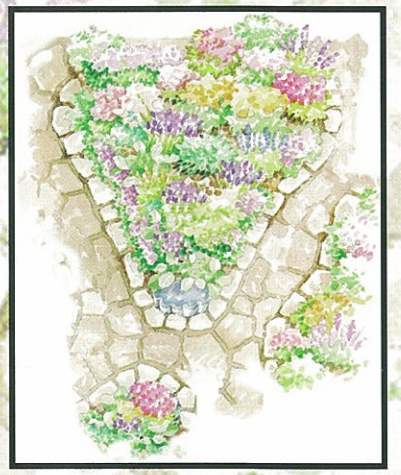
How To Hire A

Landscape Contractor



A handy checklist to help ensure that your landscaping experience is professional and positive.

Are you looking for a professional landscaper to maintain or manage a current property, renovate an existing garden or design or install a new landscape? The professional you select should have certain qualifications. Here are some things you should look for to help ensure that your landscaping experience is professional and positive:

Licenses And Insurance ...

To Protect You And Your Property

- ❑ If your landscape installation costs more then $500, the contractor must be ***licensed by the California State License Board.*** To verify that a contractor has a valid C-27 license (the license category necessary to complete most landscaping projects), contact the board at (800) 321-2752 or www.cslb.ca.gov. Contractors must demonstrate a minimum level of skill, competency and financial responsibility to be licensed.

- ❑ California's cities and counties require ***business licenses*** for firms operating within their jurisdiction.

- ❑ To ensure that pesticides are applied correctly and safely, the Department of Agriculture requires landscape maintenance firms applying pesticides in California to have a ***pest control license*** and to take continuing education courses.

- ❑ ***Workers' compensation insurance*** protects you from liability in case a worker employed by a landscape contractor is injured on your property.

- ❑ ***General liability insurance*** protects against calamities such as floods or landslides caused by construction. These policies typically offer a minimum coverage of $300,000 to $1 million for residential work and at least $1 million for commercial work.

- ❑ ***Automobile insurance*** provides additional protection when a contractor's vehicle is involved in an accident on your property.

Certification ...

To Recognize Proficiency

- ❑ Landscape professionals may become ***Certified Landscape Technicians*** by passing a rigorous "hands-on" examination. By demonstrating a thorough working knowledge of landscaping standards, professionals may be certified in up to three areas: Landscape Installation, Maintenance and Irrigation. This national certification program is administered by the California Landscape Contractors Association.

- ❑ ***Certified Landscape Professionals*** must pass a one-day examination focusing on horticulture practices and business, accounting and marketing standards. This certification program is administered by the American Landscape Contractors Association.

- ❑ ***Certified Irrigation Professionals*** have demonstrated expertise in irrigation installation and maintenance. This certification program is administered by the Irrigation Association.

- ❑ Other ***certifications and continuing education*** credits may be earned by successfully completing appropriate seminars and training programs.

- ❑ By law, employers must offer employees ***safety training and employee education programs.*** Professional landscape contractors strive to keep project sites and employees safe.

References & Portfolio ...

To demonstrate a track record of accomplishments

- ❑ A ***portfolio*** may include:
  - Photos and descriptions of completed projects,
  - Letters of appreciation,
  - Examples of community work.
  - A biography, and
  - Articles the contractor has written,

- ❑ Some professionals can justifiably take great pride in ***awards for excellence in landscaping*** presented by local, state and national associations. The goal of the awards is to encourage interest in landscaping; to recognize craftsmen who produce outstanding landscapes; to create pride in superior workmanship; and to bestow public recognition on companies, institutions, municipalities and residents for their interest in a beautiful California.

- ❑ Expect to be provided with a ***reference list*** and examples of completed projects. In addition, ask to tour projects similar to yours. Visiting a project in progress can be instructive as well.

The Benefits Of Membership

- ❑ Membership in professional associations such as the California Landscape Contractors Association demonstrate a commitment by a landscaper to stay up-to-date with industry trends and practices and to network with colleagues to promote professionalism and creativity.

2007 Consumer Confidence Report
Published by the
San Juan Family of Water Agencies
P.O. Box 2157
Granite Bay, CA 95746

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

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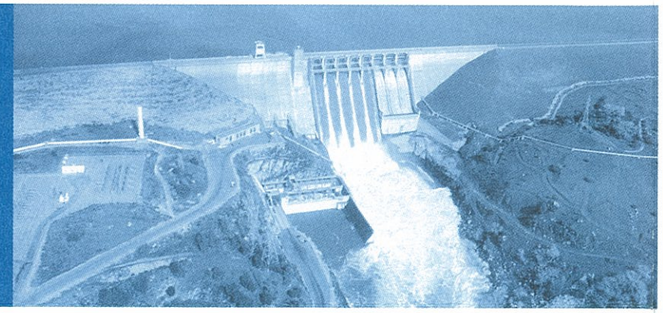
Once again, your drinking water continues to meet all state and federal drinking water standards.



CONTACT US

If you have any questions about this report or your water supply, please contact your local water provider. Each of the member agencies holds monthly board meetings that are open to the public as indicated below.

San Juan Water District

Contact Person:
Bill Sadler
(916) 791-1715
bsadler@sjwd.org
www.sjwd.org

Board Meetings:
2nd Wednesday each month
7:00 p.m.
9935 Auburn-Folsom Road
Granite Bay

Citrus Heights Water District

Contact Person:
Brian Hensley
(916) 725-6873
bhensley@chwd.org
www.chwd.org

Board Meetings:
2nd Tuesday each month
6:30 p.m.
6230 Sylvan Road
Citrus Heights

Fair Oaks Water District

Contact Person:
Michael Nisenboym, P.E.
(916) 967-5002, x113
mnisenboym@fowd.com
www.fowd.com

Board Meetings:
2nd Monday each month
6:30 p.m.
10317 Fair Oaks Boulevard
Fair Oaks

Orange Vale Water Company

Contact Person:
John Wingerter
(916) 988-1693
jwingerter@orangevalewater.com

Board Meetings:
1st Tuesday each month
6:00 p.m.
9031 Central Avenue
Orangevale

A NOTE FOR SENSITIVE POPULATIONS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

2007 Consumer Confidence Report

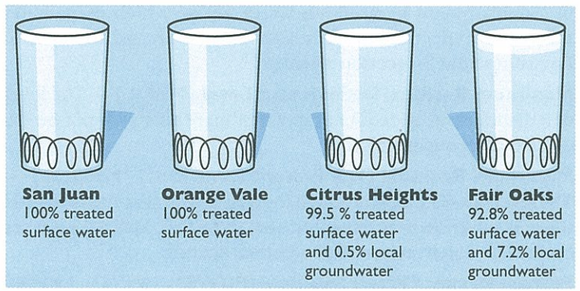
Published by the San Juan Family of Water Agencies
San Juan Water District • Citrus Heights Water District • Fair Oaks Water District • Orange Vale Water Company

The United States Environmental Protection Agency (USEPA) and the State Department of Public Health (Department) have established strict quality standards for drinking water. These standards are designed to protect consumers from waterborne disease organisms and harmful chemicals. Each year, USEPA requires public water systems to provide their consumers with a report containing information about drinking water quality and compliance with the standards. This Consumer Confidence Report (CCR) summarizes the most recent testing of your drinking water and includes a comparison of detectable constituents in your drinking water to those standards. This year's CCR concludes, once again, that your drinking water meets all federal and state drinking water standards.

The San Juan Family of Water Agencies (Agencies) is committed to ensuring the delivery of a reliable, high-quality water supply at a reasonable cost to all consumers. The Agencies consist of four water providers: San Juan Water District, Citrus Heights Water District, Fair Oaks Water District, and Orange Vale Water Company. Together they serve northeastern Sacramento County and portions of south Placer County, including Granite Bay.

WHERE DOES YOUR WATER COME FROM?

Water from the Agencies comes from two sources: treated surface water and groundwater. San Juan Water District diverts and treats surface water from Folsom Lake. This treated water is then distributed to the Agencies. Orange Vale Water Company and San Juan Water District receive 100 percent of their supply from treated surface water. If you are a consumer of Citrus Heights or Fair Oaks water districts, your water is a mixture of treated surface water from San Juan Water District and groundwater from local wells.



Source water assessments have been conducted for all the water sources to enable the Agencies to understand the activities that have the greatest potential for contaminating the drinking water supplies. The groundwater sources were assessed in 2002 and the surface water source was evaluated in 2001. These assessments were conducted in accordance with Department guidelines and copies of the complete assessments are available for review at the respective agency offices.

San Juan Water District conducted the evaluation of the Folsom Lake source. It was found to be most vulnerable to potential contamination from the Folsom Lake State Recreation Area facilities, high-density housing and associated activities such as sewer and septic systems and fertilizer, pesticide and herbicide application, as well as illegal activities and dumping. The source water is treated using conventional filtration and disinfection that is designed to remove many contaminants. Again this year, your water meets all federal and state drinking water standards.

Citrus Heights and Fair Oaks water districts conducted assessments of their local groundwater wells. It was found that all the wells are vulnerable to commercial urban activities, such as active and historic gas stations, dry cleaners, leaking underground storage tanks, and sewer collection systems, none of which are associated with any detected contaminants.

Although Orange Vale Water Company does not currently utilize available local groundwater, assessments found that wells within their service area would be most vulnerable to rural grazing activities.

WHAT'S IN YOUR WATER?

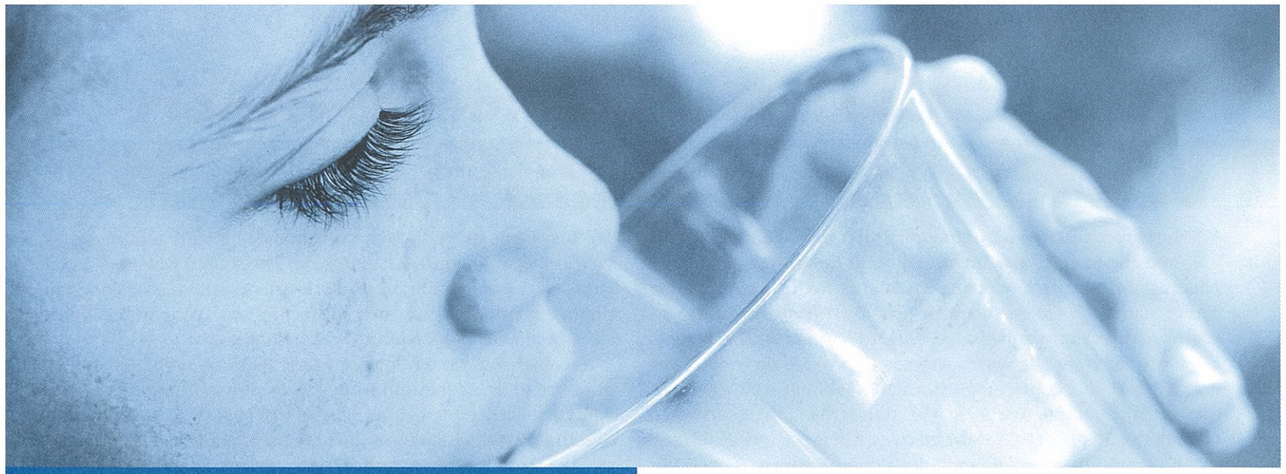
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in the source water include:

- **Microbial contaminants,** such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants,** such as salts and metals, that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides,** that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants,** including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- **Radioactive contaminants,** that can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).



IMPORTANT INFORMATION ABOUT RADON

Radon is a radioactive gas that you can't see, taste or smell. It is found throughout the United States. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will, in most cases, be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call the California Radon Program (1-800-745-7236) or call EPA's Radon Hotline at (1-800-SOS-RADON).

KEY TO ABBREVIATIONS

PPB	parts per billion or micrograms per liter (µg/L)
PPM	parts per million or milligrams per liter (mg/L)
pCi/L	picocuries per liter
NTU	nephelometric turbidity units
µS/CM	microsiemens per centimeter
ND	not detected
NR	not required
N/A	not applicable
TOC	total organic carbon
MFL	million fibers per liter (>10µm long)

HOW TO READ THE 2007 TABLE OF DETECTED CONSTITUENTS

Find your water supplier along the top of the chart. You will need to look at both San Juan surface water and the groundwater supplies if you receive water from Citrus Heights or Fair Oaks water districts. If you don't know who your water supplier is, we would be happy to help you. Please call San Juan Water District at 791-0115. You can then compare the levels of your water supply to the federal and state standards.

WATER QUALITY DEFINITIONS

Maximum Contaminant Level (MCL) — The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Public Health Goal (PHG) — The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG) — The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL) — The level of a disinfectant added for water treatment that may not be exceeded at a consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG) — The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. Environmental Protection Agency.

Primary Drinking Water Standard (PDWS) — MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Treatment Technique (TT) — A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level (AL) — The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Notification Level (NL) — Health-based advisory level set by the Department for constituents with no MCL. This is not an enforceable standard, although requirements and recommendations may apply if detected above this level.

SAN JUAN FAMILY OF WATER AGENCIES

2007 TABLE OF DETECTED CONSTITUENTS

DETECTED PRIMARY DRINKING WATER CONSTITUENTS regulated to protect your health

Constituent	Units	PHG or (MCLG) or [MRDLG]	MCL or [MRDL]	San Juan Surface Water Including Orange Vale Water Company (a)			Citrus Heights Groundwater			Fair Oaks Groundwater			Major Sources
				Range	Average	Year Sampled	Range	Average	Year Sampled	Range	Average	Year Sampled	
Aluminum	PPM	0.6	1	ND - 0.14	ND	2007	ND	ND	2007	ND	ND	2006	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic	PPB	0.004	10	ND	ND	2006	ND - 3.3	ND	2007	ND - 3.1	ND	2006	Erosion of natural deposits
Barium	PPM	2	1	ND	ND	2006	ND - 0.1	ND	2007	ND	ND	2006	Erosion of natural deposits
Fluoride	PPM	1	2.0	ND	ND	2006	0.15 - 0.16	0.16	2007	ND - 0.17	ND	2006	Erosion of natural deposits
Nitrate (as nitrate)	PPM	45	45	ND	ND	2007	3.3 - 15	7.6	2007	ND - 11	3.4	2007	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Asbestos	MFL	7	7	ND - 0.2	ND	2006	ND	ND	2006	ND	ND	2001	Erosion of natural deposits
Chlorine Residual – distribution system	PPM	[4]	[4]	0.2 - 1.05 (0.71 - 0.91)	0.66 (0.83)	2007	0.24 - 1.4	0.71	2007	0.25 - 0.94	0.60	2007	Drinking water disinfectant added for treatment
Total Trihalomethanes – distribution system	PPB	NONE	80	11 - 47 (25 - 42)	36 (34)	2007	21 - 51	37.4	2007	5.8 - 47	27.6	2007	By-product of drinking water chlorination
Haloacetic Acids – distribution system	PPB	NONE	60	12 - 15 (15 - 28)	15 (17)	2007	12 - 30	18.6	2007	2.6 - 33	15.3	2007	By-product of drinking water chlorination
Control of Disinfection By-Product precursors (TOC) (raw water) (b)	PPM	NONE	TT = 2	1.2 - 2.7	1.46	2007	NR	N/A	N/A	NR	N/A	N/A	Various natural and manmade sources

Constituent	Units	PHG OR (MCLG)	MCL	Level Found	Year Sampled	Level Found	Year Sampled	Level Found	Year Sampled	Major Sources
Turbidity (b)	NTU	NONE	TT = 1 NTU	0.058	2007	NR	N/A	NR	N/A	Soil runoff
	% Samples	NONE	TT = ≤0.3 NTU	100	2007	NR	N/A	NR	N/A	

Constituent	Units	PHG OR (MCLG)	MCL	Highest Monthly Result	Number of Months with Positive Sample	Year Sampled	Highest Monthly Result	Number of Months with Positive Sample	Year Sampled	Highest Monthly Result	Number of Months with Positive Sample	Year Sampled	Major Sources
Total Coliform Bacteria	% Samples	(0)	>5% monthly samples positive	0 (0)	0 (0)	2007	0	0	2007	1.4%	1 (c)	2007	Naturally present in the environment

DETECTED SECONDARY DRINKING WATER CONSTITUENTS regulated for aesthetic qualities

Constituent	Units	PHG or (MCLG)	MCL	San Juan Surface Water Including Orange Vale Water Company			Citrus Heights Groundwater			Fair Oaks Groundwater			Major Sources
				Range	Average	Year Sampled	Range	Average	Year Sampled	Range	Average	Year Sampled	
Aluminum	PPB	600	200	ND - 140	ND	2007	ND	ND	2007	ND	ND	2006	Erosion of natural deposits; residue from some surface water treatment processes
Color	UNITS	NONE	15	ND	ND	2006	ND - 15	5	2007	ND	ND	2006	Naturally-occurring organic materials
Odor	UNITS	NONE	3	ND - 2	1	2006	1	1	2007	ND	ND	2006	Naturally-occurring organic materials
Chloride	PPM	NONE	500	ND - 2.9	1.6	2006	14 - 16	14.6	2007	3.0 - 23.0	9.4	2006	Runoff/leaching from natural deposits
Manganese	PPB	NONE	50	ND	ND	2006	ND - 30	ND	2007	ND	ND	2006	Leaching from natural deposits
Specific Conductance	µS/CM	NONE	1,600	39.4 - 85	60.3	2006	260 - 380	306.6	2007	140 - 550	286	2006	Substances that form ions when in water
Sulfate	PPM	NONE	500	5.3 - 6.6	3	2006	6.2 - 10	8.1	2007	5.0 - 28.0	13.8	2006	Runoff/leaching from natural deposits
Turbidity	NTU	NONE	5	ND - 0.058	0.02	2007	0.39 - 3.8	3	2007	ND - 0.6	0.2	2006	Soil runoff
Total Dissolved Solids	PPM	NONE	1,000	26 - 54	40.8	2006	190 - 280	230	2007	130 - 400	232	2006	Runoff/leaching from natural deposits

DETECTED UNREGULATED DRINKING WATER CONSTITUENTS (d)

Constituent	Units	PHG or (MCLG)	NL	San Juan Surface Water Including Orange Vale Water Company			Citrus Heights Groundwater			Fair Oaks Groundwater			Major Sources
				Range	Average	Year Sampled	Range	Average	Year Sampled	Range	Average	Year Sampled	
Hardness	PPM	NONE	NONE	16 - 34	23.6	2006	90 - 160	115.3	2007	58 - 210	119	2006	Hardness is the sum of polyvalent cations present in the water, generally naturally occurring magnesium and calcium
Sodium	PPM	NONE	NONE	1.8 - 2.7	2.2	2006	13 - 24	18.3	2007	5.4 - 32	25.5	2006	Naturally occurring salt in the water
Calcium	PPM	NONE	NONE	4.2 - 10	6.8	2006	22 - 35	26.3	2007	14 - 43	27.6	2006	Erosion of natural deposits
Magnesium	PPM	NONE	NONE	1.3 - 2.2	1.6	2006	8.4 - 17	11.8	2007	5.7 - 25	12.5	2006	Erosion of natural deposits
Boron	PPB	NONE	1,000	ND	ND	2002	ND - 110	ND	2004	ND	ND	2003	Erosion of natural deposits
Hexavalent Chromium	PPB	NONE	NONE	ND	ND	2006	ND - 2	1.1	2004	ND	ND	2003	Erosion of natural deposits
Vanadium	PPB	NONE	50	ND	ND	2006	6.3 - 10	7.9	2004	ND - 7	4.9	2003	Erosion of natural deposits
Radon 222	pCi/L	NONE	NONE	ND	ND	2006	206 - 263	229	1999	114 - 333	215	2005	Erosion of natural deposits

(a) Data for OVWC Distribution System is shown in parenthesis
(b) Only surface water sources must comply with PDWS for Control of Disinfection By-Product Precursors and turbidity.
(c) Follow-up samples required by the State were collected and all were non-detect.
(d) Unregulated contaminant monitoring helps determine where certain contaminants occur and whether they need to be regulated.
The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

A Few Last Tips

©Nathan Teutli, Moza Studio

Here is a brief list to help you avoid some common gardening pitfalls and make the most of your water efficient garden:

1. Check sun/shade conditions. Sun patterns vary with time of day and year.

2. Evaluate soil and improve if necessary. Soil types can vary within a given site. An analysis based on random soil sampling can provide information for plant selection and soil amendments. If appropriate, natural soil amendments or compost can improve root development, water penetration, and retention. Remember to improve the soil before planting or installing an irrigation system.

3. Promote good drainage. Excess moisture in the root zone increases occurrence of disease and pest infestations and promotes root rot.

4. Follow proper planting techniques. When planting, space new plants based upon mature size and shape. Even drought-tolerant plants, when new, need a good consistent supply of water to get started. Once established in the soil, watering can be reduced.

5. Don't overwater! Use a soil probe or your finger to check for soil moisture below the surface. The soil in the root zone can be moist even when the surface appears dry.

6. Consider the relationship among plants based upon their mature sizes and shapes.

7. A garden or yard is personal, so select plants to display colors, foliage, and flowers that appeal to you. Foliage, bark, and flower contrast and seasonal change add beauty to your water efficient landscape.

For more information please contact your local conservation district or UC Extension (Master Gardeners chapter). Special thanks to the UC Davis Arboretum, Master Gardeners, and the UC Davis Herbarium.

Master Gardener

NRCS Natural Resources Conservation Service

Backyard Conservation
It'll grow on you.

NRCS Natural Resources Conservation Service

Backyard Conservation
It'll grow on you.

Water Efficient Landscaping

Getting Started

Water is just one component of your landscape planning–but in the arid west, it's an extremely important component. Planning for water efficiency in your landscape design not only helps the environment, it also helps you avoid unnecessary headaches and heartaches over foiled plantings and disappointing designs.

More than half of the water consumed by an average household is used for landscaping. In the summer months water use can increase by 250%, the majority of which goes for outdoor watering. Xeriscaping, a practice based on designing an attractive, sustainable landscape that minimizes water use and sound horticultural principles, is one possible solution to this problem.

Xeriscape is coined from the Greek word Xeros, which means dry. But unlike the dry unattractive landscape some people may picture when they hear the term, xeriscaped, landscapes can be both beautiful and water efficient. Xeriscaping is an excellent alternative to a "traditional" landscape, makes wise use of our water supply, and helps keep your water bills reasonable.

Whether planning a new landscape or renovating an old one, following these principles will help you save water and achieve your gardening goals.

Plan and design comprehensively. When making plans for your garden, think about how you use your yard. Do you entertain guests, need a place for children to play, want to block an ugly view? Once you have determined your needs, consider the view, the slope, sun exposure, placement of structures, existing vegetation, and the soils of the area. Create a plan deciding where things will be and when different areas will be done; Landscapes are often installed in phases.

Create practical turf areas. Lush green lawns can be beautiful, but they are one of the largest consumers of water in a landscape. Reducing turf areas or locating them at the bottom of slopes where they collect runoff and have proper drainage can significantly reduce water use. This does not mean all turf areas should be eliminated. By selecting water efficient varieties and properly locating turf, it can still play an important function in the landscape.

Use water-efficient plants. A plant list is included inside this handout. Gardening books and your local nursery are other good sources for plant suggestions. Plants native to your local area are often well adapted to arid conditions and are also good garden candidates.

Water efficiently with properly designed irrigation systems. The irrigation system should be well planned and managed. Drip or trickle irrigation systems apply the water where it does the most good: directly to the soil. This reduces evaporation and and saves you time now spent watering by hand. Not all plants need the same amount of water. Group plants with like water needs together. Also, irrigation needs change with the season and the weather. Water needs vary with plant variety, soil conditions, temperature and rainfall. Needs also change as plants mature.

Use organic mulches to reduce evaporation. Mulches minimize evaporation, reduce weed growth, slow erosion, and help prevent soil temperature fluctuations. When applied at a depth of 3-6 inches, mulches can be one key to a successful water efficient landscape.

Practice appropriate maintenance. The quality and efficiency of the xeriscape will be best maintained through proper pruning, weeding, and attention to the irrigation system.

✳ Plant List ✳

Here are a few examples of water efficient plants. Using such plants in your landscape could help improve water use efficiency.

Check with a local nursery to see which plants are available in your area.

Remember to also consider the overall look of your landscape before deciding on which plants to use.

Groundcovers

Juniperus conferta
shore juniper

Helianthemum
sunrose

Cotoneaster dammeri
bearberry cotoneaster

Hypericum calycinum
Saint Johnswort

Ceanothus, prostrate forms
creeping wild lilac

Verbena tenuisecta
moss verbena

Teucrium chamaedrys 'Nanum'
creeping wall germander

Baccharis pilularis, dwarf forms
dwarf coyote brush

Juniperus horizontalis 'Bar Harbor'
Bar Harbor juniper

Osteospermum
freeway daisy, creeping African daisy

Aptenia cordifolia × *Platythyra haeckeliana*
red apple ice plant, hearts & flowers ice plant

Arctostaphylos, creeping selections
manzanita

Rosmarinus officinalis 'Prostratus'and 'Renzels'
dwarf rosemary

Mahonia aquifolium 'Compacta' [synonym *Berberis aquifolium* 'Compactum']
dwarf Oregon grapeVerbena tenuisecta

Shrubs

Arctostaphylos
manzanita

Rosa
roses

Pyracantha
firethorn

Syringa vulgaris
common lilac

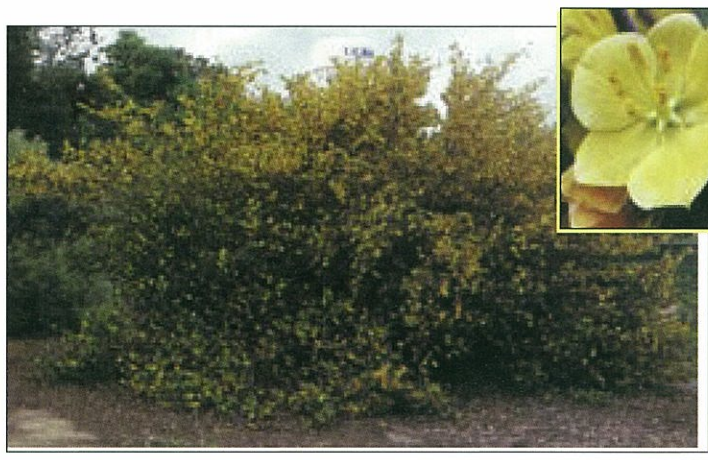
Cistus
rockroses

Arbutus unedo
strawberry tree

Escallonia bifida [synonym *E. montevidensis*]
white escallonia

Feijoa sellowiana [synonym *Acca sellowiana*]
pineapple guava

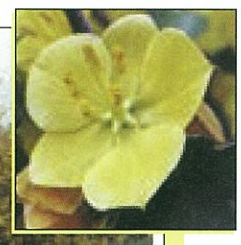
Thuja orientalis & T. occidentalis, shrub forms
shrub arborvitae



Nerium oleander
oleander

Cercis occidentalis
western redbud

Cotinus coggygria
smoke tree



Nandina domestica
heavenly bamboo

Punica granatum
pomegranate

Photinia × *fraseri*
hybrid photinia

Pittosporum tobira
tobira, Japanese mock-orange

Fremontodendron californicum
common flannel bush

Grevillea lavandulacea
lavender-leaf grevillea

Carpenteria californica
bush anemone

Leucophyllum frutescens
Texas-sage

Callistemon citrinus
lemon bottlebrush

Rhaphiolepis indica
Indian hawthorn

Symphoricarpos albus
common snowberry

Lonicera fragrantissima
winter honeysuckle

Heteromeles arbutifolia
toyon, Christmas berry

Perennials

Eschscholzia californica
California poppy

Achillea filipendulina
fernleaf yarrow

Agapanthus 'Peter Pan'
dwarf lily-of-the-Nile

Armeria
thrift, sea pink

Diascia cordata
twinspur

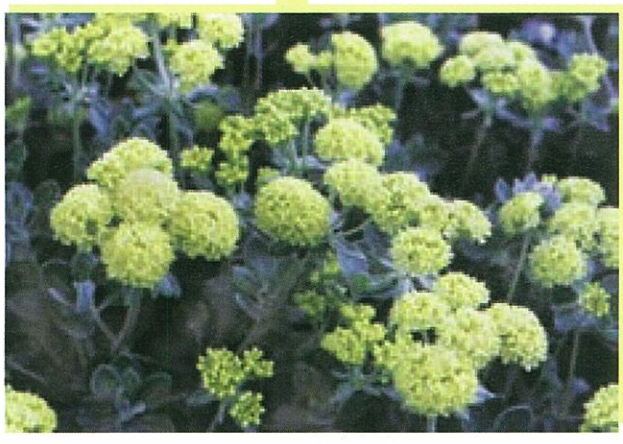
Dietes vegeta
fortnight lily

Eriogonum umbellatum
sulfur flower

Hemerocallis
daylily

Penstemon
beard tongue

Epilobium canum [synonym *Zauschneria*]
California fuchsia



Trees

Evergreen Conifers

Calocedrus decurrens
incense cedar

Cedrus deodara
deodar cedar

Pinus canariensis
Canary Islands pine

Pinus contorta
shore pine

Broadleaved Evergreens

Rhus lancea
African sumac

Casuarina cunninghamiana
beefwood

Quercus ilex
holly oak

Quercus suber
cork oak

Quercus agrifolia
coast live oak

Laurus nobilis
Grecian laurel

Maytenus boaria
mayten tree

Prunus ilicifolia
hollyleaf cherry

Xylosma congestum
xylosma

Deciduous

Quercus lobata
valley oak

Acer truncatum
Shantung maple

Zelkova serrata
Japanese zelkova

Pistacia chinensis
Chinese pistache

Celtis occidentalis
common hackberry

Quercus douglasii
blue oak

Sapium sebiferum
Chinese tallow tree

Robinia × *ambigua* 'idahoensis'
Idaho locust

Gymnocladus dioica
Kentucky coffee-tree

Sophora japonica
Japanese pagoda tree

Koelreuteria paniculata
goldenrain tree

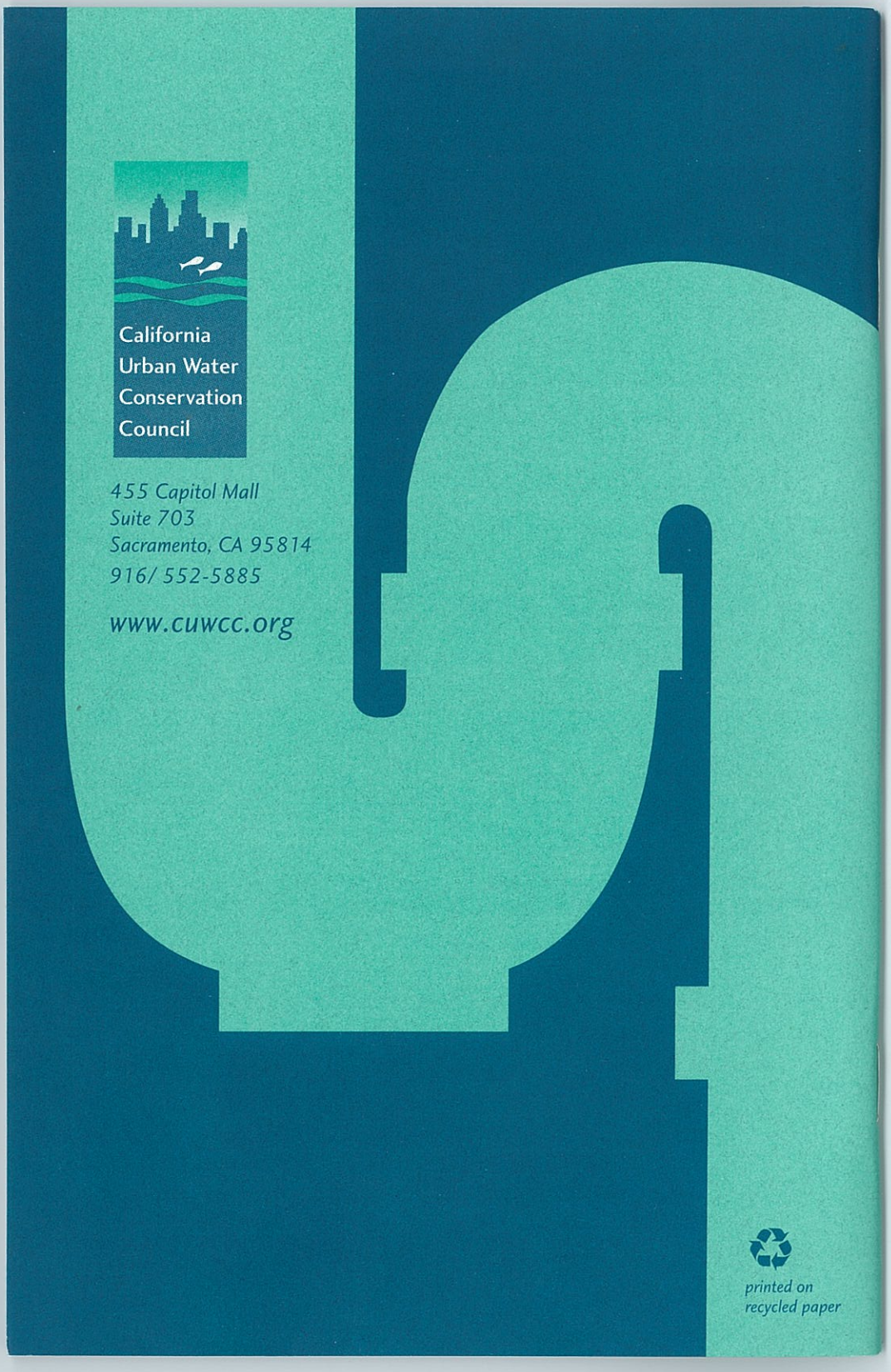
Lagerstroemia indica & hybrids
crape myrtle

Practical Plumbing HANDBOOK

California Urban Water Conservation Council

Includes important water-saving tips

Revised 2006



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Sunset
LIFE IN THE WEST

Backyards from the Ground Up

u love your
w house.
t the backyard
bare ground.
ow do you create
ur dream garden
thout breaking
e bank?

ound the West, in cities and suburbs, big houses on small lots mean one thing: ace for outdoor living is diminishing. *Sunset* staff members tackled this problem designing gardens for four model homes in the Esperanza Estates development Esparto, near Davis, California. Their goal was to provide a variety of affordable dscape designs for modest backyards (about 60 by 30 feet) on a budget of ghly $15,000 each for materials, plus installation. The gardens—all on challenging es, with wind, hot sun, and shade near the house—had to be easy to maintain d simple to modify as the future owners' needs change.

Conserving water in your new backyard landscape

In California, landscape irrigation uses more water than all other household water uses combined. So it's important to design your garden for water efficiency. A water-efficient landscape can be lush and beautiful. The tips below will help.

Choose plants that are adapted to your climate and site. Determine your climate zone (see "Create a Water-wise Yard," right), then focus on your yard's "microclimate." Areas of the garden with northern exposure are normally shadier and cooler than those with southern exposure. Also consider shade from existing trees when planting.

Limit lawn area. Grass uses lots of water, so unless you plan to use a lawn for an entertainment area, sports, or children's play, keep it small or eliminate it. Avoid planting turf in narrow strips or oddly shaped areas, which are difficult to irrigate. Consider using drought-tolerant groundcovers instead.

Use porous paving for patios and paths. This allows rain to soak into the ground rather than running off. Flagstone set in gravel, pavers or bricks set in sand, and decomposed granite are good choices.

Check your soil. If it's too sandy or clayey, improve its water retention by digging in compost.

Group plants by water and exposure needs. Cluster low-water-use plants in one spot, and high-water-use plants in another, so each hydrozone can be irrigated separately.

Install an efficient irrigation system before you plant. Hire a qualified irrigation professional to do it for you. Use drip irrigation for shrubs and planting beds, and overhead irrigation for lawn areas. Use 6-inch pop-up or multistream rotary sprinkler heads for economical overhead irrigation. Install a "Smart" irrigation controller that schedules irrigation based on the plant's actual water needs (see "Create a Water-wise Yard," right).

Maintain your irrigation system. Check your system frequently for broken or misaligned sprinkler heads. Adjust, clean, or replace malfunctioning heads, emitters, and other parts with the same type and manufacturer. Irrigate in the early morning hours to minimize evaporation. Don't forget to adjust your irrigation controller to irrigate less during fall and winter.

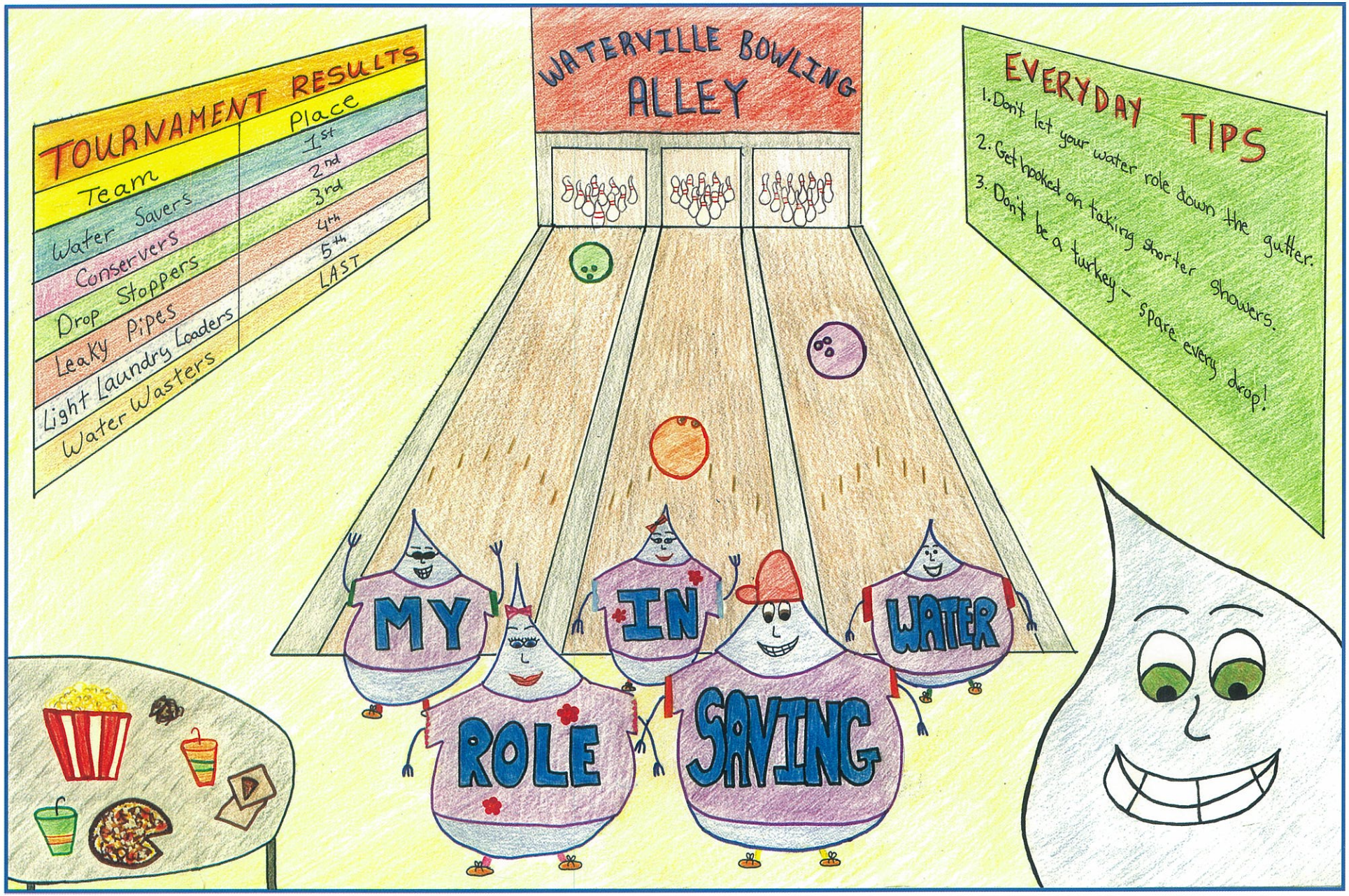
Mulch. Apply a 3-inch layer of mulch or compost around plants to reduce evaporation, promote plant growth, and reduce weeds.

Create a water-wise yard

The websites below offer a wealth of information on how to lower your water bills and keep your landscape healthy.

- Water-wise landscaping, efficient irrigation, and native plants for Southern California, Metropolitan Water District of Southern California: *www.bewaterwise.com*
- San Francisco Bay-Friendly Landscaping and Gardening, Alameda County Waste Management Authority: *www.stopwaste.org/home/index.asp?page=8*
- Lush and efficient landscaping for Southwest desert climates, Coachella Valley Water District: *www.cvwd.org/lush&eff.htm*
- *Sunset* climate zones for selecting adapted plants: *www.sunset.com/sunset/garden/article/0,20633,845238,00.html*
- Water-wise landscaping, plant information, and picture gallery, California Urban Water Conservation Council: *www.h2ouse.org/tour/landscaping.cfm*
- Consumer irrigation tips and how to hire a qualified irrigation contractor: *www.irrigation.org/Rsrcs/default.aspx?pg=consumer_info.htm&id=140#3*
- Smart Irrigation Controllers: *www.irrigation.org/swat*
- Design and installation tutorials for efficient irrigation systems: *www.irrigationtutorials.com*

THOMAS J. STORY; ILLUSTRATIONS: JULIE WEST; CONSTRUCTION PHOTOGRAPHS: NORM PLATE



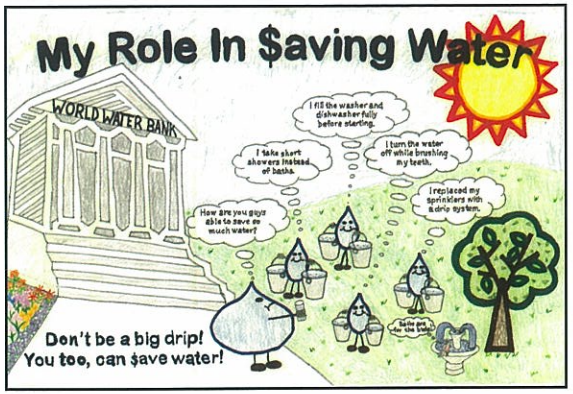
Shanna Rindal

6th Grade, Green Oaks Fundamental School, Mrs. Williams

Orange Vale Water Company

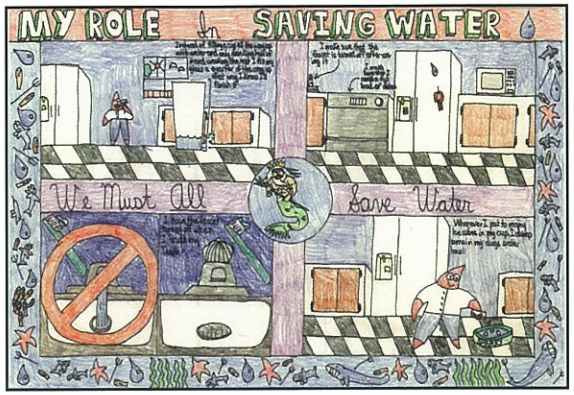
January

February



March

April



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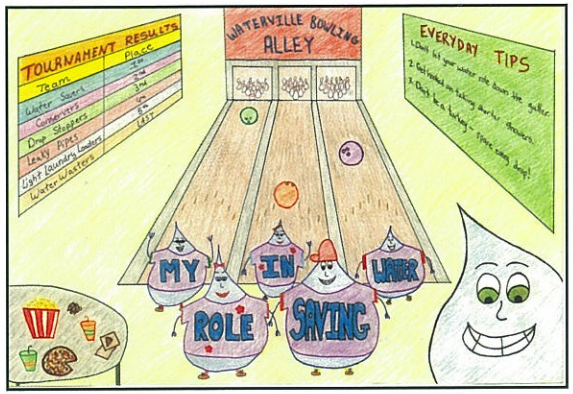

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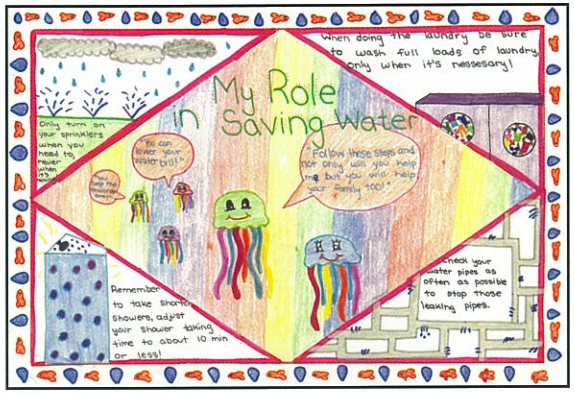

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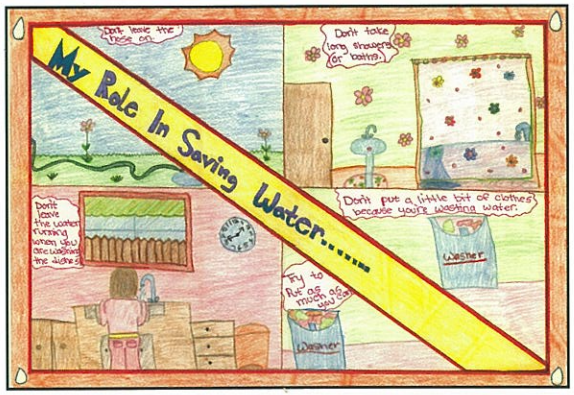
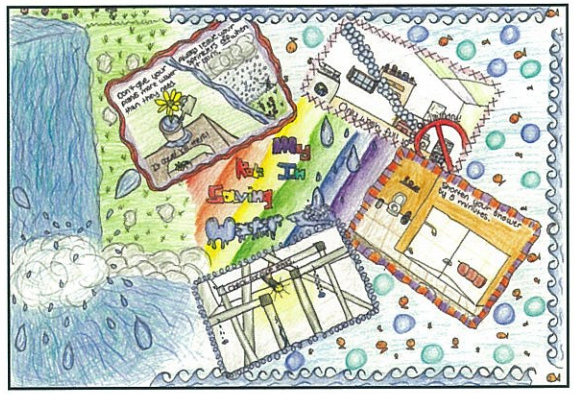


August



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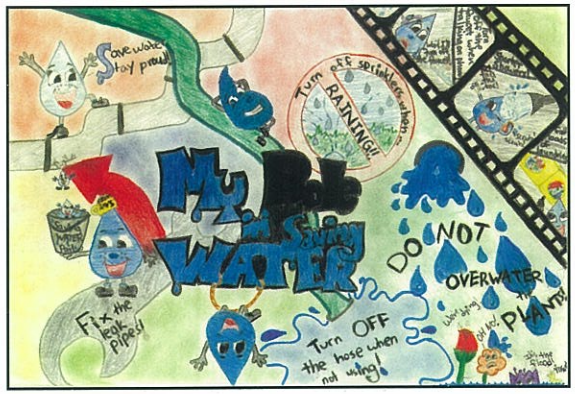

October

November

December

APPENDIX J

Draft Plan Correspondence

The District did not receive correspondence related to the Draft Plan.